



HEWLETT  
PACKARD

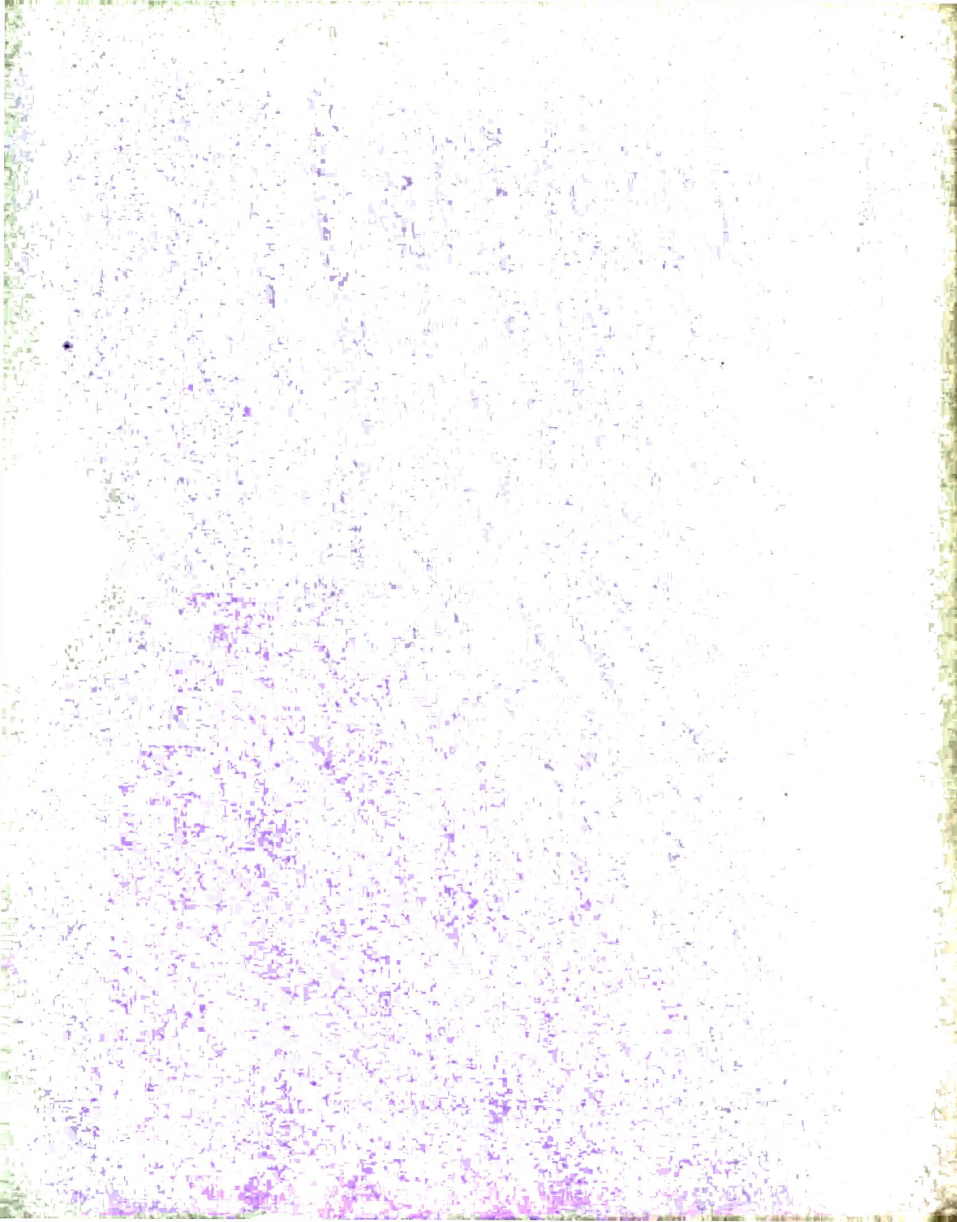
---

# Personal Information Guide

---

# OMNIBOOK





---

## Personal Information Guide

---

## **Edition History**

Edition 1 ..... September 1993



The contents of this manual are printed on recycled paper.



---

## Notice

For warranty and regulatory information, see chapters 14 and 15 of the *OmniBook Operating Guide*.

This manual and any examples contained herein are provided "as is" and are subject to change without notice. Hewlett-Packard Company makes no warranty of any kind with regard to this manual, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Hewlett-Packard Co. shall not be liable for any errors or for incidental or consequential damages in connection with the furnishing, performance, or use of this manual or the examples herein.

Consumer transactions in Australia and the United Kingdom: The above disclaimers and limitations shall not apply to Consumer transactions in Australia and the United Kingdom and shall not affect the statutory rights of Consumers.

© Copyright Hewlett-Packard Company 1993. All rights reserved. Reproduction, adaptation, or translation of this manual is prohibited without prior written permission of Hewlett-Packard Company, except as allowed under the copyright laws.

The programs that control this product are copyrighted and all rights are reserved. Reproduction, adaptation, or translation of those programs without prior written permission of Hewlett-Packard Co. is also prohibited.

Portions of the programs that control this product may also be copyrighted by Microsoft Corporation, Traveling Software, Inc., SystemSoft Corp., Houghton Mifflin Co., Chips & Technologies, Inc., Delrina Technology, Inc., and Future Soft Engineering, Inc. See the individual programs for additional copyright notices.

Microsoft, MS, and MS-DOS are registered trademarks and Windows is a trademark of Microsoft Corporation. LapLink Remote Access is a trademark of Traveling Software, Inc. WinFax and Delrina are registered trademarks of Delrina Technology Inc. DynaComm and Future Soft Engineering, Inc. are registered trademarks of Future Soft Engineering, Inc. PostScript is a registered trademark of Adobe Systems, Inc., in the U.S. and other countries. CompuServe is a U.S. trademark of CompuServe, Inc.

Hewlett-Packard Company  
Corvallis Division  
1000 N.E. Circle Blvd.  
Corvallis, OR 97330, U.S.A.

---

# In This Book

The *Personal Information Guide* provides three applications to help you keep track of things—meetings and appointments, addresses and telephone numbers, personal records and finances—to mention just a few.

## **The Appointment Book**

The Appointment Book is a flexible, time-management system that lets you quickly schedule and review your daily activities for the most efficient and productive use of your time.

## **The Phone Book**

The Phone Book provides a convenient place for you to record names, addresses, telephone numbers, and other information you need to store and look up quickly.

## **The Hewlett Packard Financial Calculator**

The HP Financial Calculator provides a complete set of tools that let you solve problems dealing with general arithmetic, technical math, business percentages, interest rate conversions, and time value of money—to mention just a few.

## *If You're New To Windows*

If you're new to the Windows operating environment, you should learn Windows fundamentals before you begin working with the Information Management applications. If necessary, refer to your Windows documentation or the OmniBook *Quick Start Guide* for a review.

---

## Part 1: Appointment Book

### 1. Using the Appointment Book

|                                                           |      |
|-----------------------------------------------------------|------|
| Making the Most of Your Time . . . . .                    | 1-3  |
| To start the Appointment Book . . . . .                   | 1-3  |
| To change the date and time . . . . .                     | 1-4  |
| To change the date and time format . . . . .              | 1-4  |
| To schedule an appointment or event . . . . .             | 1-6  |
| To schedule a task . . . . .                              | 1-8  |
| To view your tasks . . . . .                              | 1-9  |
| To check the status of your tasks . . . . .               | 1-10 |
| To prioritize your tasks . . . . .                        | 1-10 |
| To check off a completed task . . . . .                   | 1-11 |
| To print items from your schedule . . . . .               | 1-11 |
| Editing Your Schedule . . . . .                           | 1-13 |
| To change the appointment time . . . . .                  | 1-13 |
| To change the appointment alarm . . . . .                 | 1-13 |
| To attach a note . . . . .                                | 1-14 |
| To edit other details . . . . .                           | 1-15 |
| To delete an item from your schedule . . . . .            | 1-15 |
| To copy or move an appointment or event . . . . .         | 1-15 |
| To copy or move part of an appointment or event . . . . . | 1-16 |
| To copy or move a task . . . . .                          | 1-16 |
| To copy or move part of a task . . . . .                  | 1-17 |
| Getting from Here to There . . . . .                      | 1-18 |
| To move around in the Appointment Book . . . . .          | 1-18 |
| To change views . . . . .                                 | 1-19 |
| To go to a different date . . . . .                       | 1-24 |
| To find a text string . . . . .                           | 1-24 |
| Setting Up Repeating Activities . . . . .                 | 1-25 |
| To schedule repeating activities . . . . .                | 1-25 |
| To schedule a daily task . . . . .                        | 1-26 |
| To schedule a weekly appointment . . . . .                | 1-27 |
| To schedule a monthly appointment . . . . .               | 1-28 |
| To schedule a yearly event . . . . .                      | 1-29 |
| To customize a repeat schedule . . . . .                  | 1-30 |

|                                                            |      |
|------------------------------------------------------------|------|
| To edit a repeating item . . . . .                         | 1-31 |
| To delete a repeating item . . . . .                       | 1-31 |
| Don't Be Late: Setting Alarms . . . . .                    | 1-32 |
| To set an alarm as an appointment reminder . . . . .       | 1-32 |
| To set an alarm to run a program . . . . .                 | 1-33 |
| To answer an alarm . . . . .                               | 1-34 |
| To silence all alarms . . . . .                            | 1-34 |
| To set the snooze alarm . . . . .                          | 1-35 |
| Setting Appointment Book Defaults . . . . .                | 1-36 |
| To set appointment defaults . . . . .                      | 1-37 |
| To set event defaults . . . . .                            | 1-37 |
| To set task defaults . . . . .                             | 1-38 |
| To customize the Appointment Book display . . . . .        | 1-38 |
| Managing Your Appointment Book Files . . . . .             | 1-41 |
| To create a new Appointment Book file . . . . .            | 1-41 |
| To open another Appointment Book file . . . . .            | 1-42 |
| To open an HP 100LX file . . . . .                         | 1-42 |
| To open an HP 95LX appointment file . . . . .              | 1-43 |
| To copy an Appointment Book file . . . . .                 | 1-43 |
| To extract information and save it in a new file . . . . . | 1-44 |
| To remove (delete) scheduled information . . . . .         | 1-45 |
| To merge two Appointment Book files . . . . .              | 1-46 |
| Appointment Book Commands . . . . .                        | 1-47 |
| Appointment Book Keyboard Shortcuts . . . . .              | 1-52 |
| To use the Appointment Book keyboard shortcuts . . . . .   | 1-52 |
| To use the Appointment Book navigation keys . . . . .      | 1-53 |

## Part 2: Phone Book

### 2. Using the Phone Book

|                                             |      |
|---------------------------------------------|------|
| Storing Records in the Phone Book . . . . . | 2-3  |
| To start the Phone Book . . . . .           | 2-3  |
| To add a record to the Phone Book . . . . . | 2-4  |
| To create a category for a record . . . . . | 2-5  |
| To delete a category . . . . .              | 2-6  |
| To move around in the Phone Book . . . . .  | 2-7  |
| To edit a phone record . . . . .            | 2-8  |
| To copy a phone record . . . . .            | 2-8  |
| To delete a phone record . . . . .          | 2-9  |
| To print your Phone Book . . . . .          | 2-10 |
| To print selected records . . . . .         | 2-10 |

|                                                          |      |
|----------------------------------------------------------|------|
| Finding and Displaying Phone Records . . . . .           | 2-11 |
| To find a record in the Phone Book . . . . .             | 2-11 |
| To find a text string . . . . .                          | 2-12 |
| Creating and Using Subsets . . . . .                     | 2-13 |
| To define the records for a subset . . . . .             | 2-14 |
| To create a subset of records . . . . .                  | 2-15 |
| To display a subset . . . . .                            | 2-18 |
| To delete a subset . . . . .                             | 2-18 |
| To edit a subset . . . . .                               | 2-19 |
| To rename a subset . . . . .                             | 2-19 |
| Customizing the Display . . . . .                        | 2-20 |
| To hide columns . . . . .                                | 2-20 |
| To show hidden columns . . . . .                         | 2-20 |
| To sort a list of phone records . . . . .                | 2-21 |
| To change the width of a column . . . . .                | 2-22 |
| To move a column . . . . .                               | 2-23 |
| Managing Your Phone Book Files . . . . .                 | 2-24 |
| To create a new Phone Book file . . . . .                | 2-24 |
| To open a Phone Book file . . . . .                      | 2-24 |
| To open an HP 95LX Phone Book file . . . . .             | 2-25 |
| To open an HP 100LX file . . . . .                       | 2-26 |
| To merge two Phone Book files . . . . .                  | 2-26 |
| To extract records and save them in a new file . . . . . | 2-27 |
| Phone Book Commands . . . . .                            | 2-28 |
| Phone Book Keyboard Shortcuts . . . . .                  | 2-31 |
| To use the Phone Book keyboard shortcuts . . . . .       | 2-31 |
| To use the Phone Book navigation keys . . . . .          | 2-32 |

## Part 3: HP Financial Calculator

### 3. Calculator Basics

|                                             |     |
|---------------------------------------------|-----|
| Getting Started . . . . .                   | 3-3 |
| To start the Calculator . . . . .           | 3-3 |
| To use the Arithmetic application . . . . . | 3-4 |
| To enter and edit numbers . . . . .         | 3-5 |
| To use the Arithmetic memory keys . . . . . | 3-5 |
| To use the embedded keypad . . . . .        | 3-6 |
| To perform a simple calculation . . . . .   | 3-7 |
| Saving and Recalling Numbers . . . . .      | 3-8 |
| To display the stack . . . . .              | 3-9 |
| To move numbers in the stack . . . . .      | 3-9 |



|                                                                                    |      |
|------------------------------------------------------------------------------------|------|
| To store a number in the register . . . . .                                        | 3-10 |
| To recall a number from the register . . . . .                                     | 3-11 |
| To do arithmetic with registers . . . . .                                          | 3-11 |
| To clear registers or the stack . . . . .                                          | 3-11 |
| To copy data to the Clipboard . . . . .                                            | 3-12 |
| To insert Clipboard contents . . . . .                                             | 3-13 |
| Doing Math in the Calc Line . . . . .                                              | 3-14 |
| To use the Toolbar math buttons . . . . .                                          | 3-14 |
| To perform chain calculations . . . . .                                            | 3-15 |
| To change the order of operation . . . . .                                         | 3-15 |
| To figure percent . . . . .                                                        | 3-16 |
| To round a number . . . . .                                                        | 3-16 |
| To set the automatic constant . . . . .                                            | 3-17 |
| To clear the automatic constant . . . . .                                          | 3-18 |
| Customizing the Calculator . . . . .                                               | 3-19 |
| To set the number format . . . . .                                                 | 3-19 |
| To set the angle mode . . . . .                                                    | 3-20 |
| To set RPN or algebraic mode in the Calculator . . . . .                           | 3-21 |
| To learn more about RPN . . . . .                                                  | 3-21 |
| <br><b>4. Technical Math Functions</b>                                             |      |
| Solving Technical Math Problems . . . . .                                          | 4-3  |
| To start the Math application . . . . .                                            | 4-3  |
| To calculate integer part, fractional part, or absolute value of a number. . . . . | 4-4  |
| To use the exponential and logarithmic functions . . . . .                         | 4-4  |
| To use the trigonometric functions . . . . .                                       | 4-5  |
| To use the angle- and hour-conversion functions . . . . .                          | 4-6  |
| To use the polar/rectangular coordinate functions . . . . .                        | 4-6  |
| To use the probability functions . . . . .                                         | 4-7  |
| <br><b>5. The Financial Applications</b>                                           |      |
| Using the Financial Applications . . . . .                                         | 5-3  |
| Business Percentage Calculations . . . . .                                         | 5-4  |
| To start the Business application . . . . .                                        | 5-4  |
| To calculate percent change . . . . .                                              | 5-5  |
| To calculate percent of total . . . . .                                            | 5-6  |
| To calculate markup and margin . . . . .                                           | 5-7  |
| Time Value of Money . . . . .                                                      | 5-10 |
| To start the TVM application . . . . .                                             | 5-10 |
| To solve for unknown values . . . . .                                              | 5-11 |

|                                                      |      |
|------------------------------------------------------|------|
| To store financial data . . . . .                    | 5-11 |
| To set BEGIN or END mode . . . . .                   | 5-13 |
| To calculate monthly payments . . . . .              | 5-13 |
| To compare cases . . . . .                           | 5-14 |
| Calculating Amortization . . . . .                   | 5-15 |
| To display the Amortization screen . . . . .         | 5-15 |
| Calculating Interest Rate Conversions . . . . .      | 5-18 |
| To display the Interest Conversion screen . . . . .  | 5-18 |
| To convert interest rates . . . . .                  | 5-19 |
| To calculate and compare interest rates . . . . .    | 5-21 |
| <br><b>6. Currency and Other Unit Conversions</b>    |      |
| Using the Conversion Application . . . . .           | 6-3  |
| To start the Conversion application . . . . .        | 6-3  |
| To set a conversion rate . . . . .                   | 6-4  |
| To calculate currency exchanges . . . . .            | 6-5  |
| To add a new currency to the calculator . . . . .    | 6-6  |
| To edit the currency list . . . . .                  | 6-7  |
| To convert any other unit . . . . .                  | 6-7  |
| <br><b>7. Solving Equations</b>                      |      |
| Using the Solver Application . . . . .               | 7-3  |
| To start the Solver application . . . . .            | 7-3  |
| To add an equation to the catalog . . . . .          | 7-4  |
| To solve an equation . . . . .                       | 7-6  |
| To edit an equation . . . . .                        | 7-7  |
| To change the order of variables . . . . .           | 7-8  |
| To clear variables . . . . .                         | 7-8  |
| To delete a single equation . . . . .                | 7-9  |
| To delete all equations at once . . . . .            | 7-9  |
| To recover deleted equations . . . . .               | 7-10 |
| Using Conditional Expressions in Equations . . . . . | 7-11 |
| Understanding How the Solver Works . . . . .         | 7-12 |
| To stop and start an iterative search . . . . .      | 7-12 |
| To enter one guess and start solving . . . . .       | 7-13 |
| To enter two guesses . . . . .                       | 7-13 |
| Working With Multiple Equation Files . . . . .       | 7-14 |
| To save the equation catalog in a new file . . . . . | 7-14 |
| To save changes to your equation list . . . . .      | 7-15 |
| To open an existing equation file . . . . .          | 7-15 |
| To create a new equation file . . . . .              | 7-16 |

## **8. Practical Examples**

|                                                         |      |
|---------------------------------------------------------|------|
| Real Estate Examples . . . . .                          | 8-3  |
| To calculate an annual interest rate . . . . .          | 8-4  |
| To calculate a balloon payment . . . . .                | 8-5  |
| To calculate a quarterly payment . . . . .              | 8-6  |
| To calculate a Canadian mortgage . . . . .              | 8-7  |
| Savings and Investment Examples . . . . .               | 8-10 |
| To calculate return on savings . . . . .                | 8-10 |
| To estimate monthly mortgage payments . . . . .         | 8-12 |
| Personal Finance . . . . .                              | 8-13 |
| To calculate lease payments . . . . .                   | 8-13 |
| To calculate the price of an insurance policy . . . . . | 8-15 |

## **9. Calculator Reference**

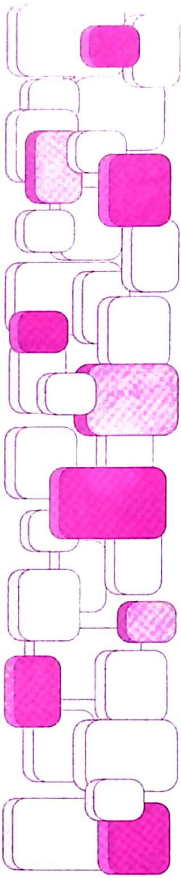
|                                         |      |
|-----------------------------------------|------|
| Business Functions . . . . .            | 9-3  |
| Time Value of Money Functions . . . . . | 9-4  |
| Amortization Functions . . . . .        | 9-5  |
| Interest Conversion Functions . . . . . | 9-6  |
| Math and Trig Functions . . . . .       | 9-7  |
| Solver Functions . . . . .              | 9-10 |

## **Part 4: Troubleshooting**

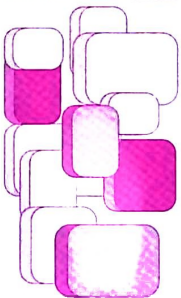
## **10. If Things Go Wrong**

|                                   |      |
|-----------------------------------|------|
| Appointment Book . . . . .        | 10-3 |
| Phone Book . . . . .              | 10-4 |
| HP Financial Calculator . . . . . | 10-6 |

## **Index**



## Part 1: Appointment Book





---

## Using the Appointment Book

---

# Using the Appointment Book

## In This Chapter

With the Appointment Book, you can quickly schedule, edit, and delete appointments, and keep track of special events like holidays, birthdays, or anniversaries. You can keep a current list of things to do or use the Appointment Book alarms to alert you to upcoming activities.

In this chapter you'll learn how to

- ▶ Schedule appointments, events, and To-Do tasks.
- ▶ Attach a detailed note to a scheduled item.
- ▶ Prioritize your tasks in order of importance.
- ▶ Review your daily, weekly, or monthly schedule at a glance.
- ▶ See an overview of future events.
- ▶ Set alarms to remind you of important meetings.
- ▶ Print a copy of your schedule—for yourself or others.



# Making the Most of Your Time

This section provides step-by-step procedures for managing appointments, events, and tasks, including the following:

- ▶ Starting the Appointment Book.
- ▶ Scheduling appointments and events.
- ▶ Scheduling and prioritizing tasks.
- ▶ Printing your schedule.

## To start the Appointment Book

- Press **[Fn] + [F3]**.

-or-

From Program Manager, double-click the Appointment Book icon.

The first time you start the Appointment Book, you'll see today's date along with any scheduled appointments or events. After that, the Appointment Book opens to the last screen you were in before closing.

Displayed activities are for this day and date      Today's date and time

A scheduled event

Aerobics appointment with alarm scheduled for 11:00 am

A preview of your list of things To-Do

| March 1993 |    |    |    |    |    |    |
|------------|----|----|----|----|----|----|
| Su         | Mo | Tu | We | Th | Fr | Sa |
|            | 1  | 2  | 3  | 4  | 5  | 6  |
| 7          | 8  | 9  | 10 | 11 | 12 | 13 |
| 14         | 15 | 16 | 17 | 18 | 19 | 20 |
| 21         | 22 | 23 | 24 | 25 | 26 | 27 |
| 28         | 29 | 30 | 31 |    |    |    |

Next Appt: 9:00a 5/5/93  
Weekly Staff Meeting

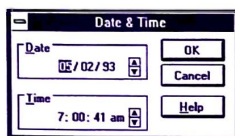
To-Do:  
1 Pick up laundry

## To change the date and time

One of the first things you'll want to do with the Appointment Book is check the date and time and set them if necessary.

1. From Program Manager, choose Control Panel.
2. From Control Panel, choose Date/Time.
3. Type or select the correct date and time.
4. Choose OK.

Type or select  
the correct date  
and time.



## To change the date and time format

You can also change the format for the date or time—for example—to a 24-hour clock.

1. From Program Manager, choose Control Panel.
2. From Control Panel, choose International.
3. In the Date Format or Time Format box, choose Change.
4. Select the date or time settings you want, then choose OK.
5. Choose OK again to close the dialog box.

## What You Can Schedule

There are three basic kinds of activities that you can schedule with the Appointment Book—*appointments*, *events*, and *tasks*.

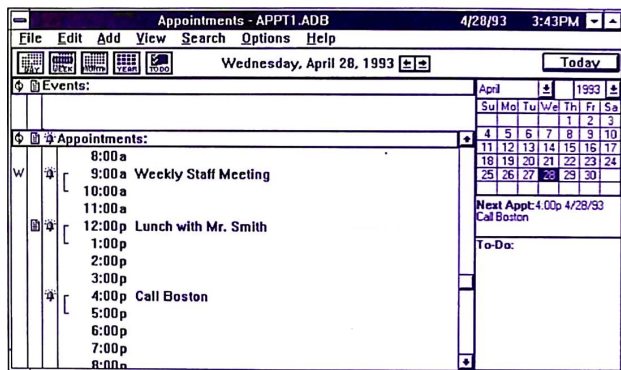
**Appointments** An appointment is an activity associated with a particular day and time—for example, a staff meeting or a dental appointment.

**Events** An event is an activity associated with a particular day, but not a particular time—for example, a birthday, holiday, or anniversary.

**Tasks** A task is something else you need to do. Tasks appear as To-Do items in the Appointment Book.

These symbols show important information about appointments and events.

-  This appointment or event repeats on a regular basis.
-  A note is attached to this appointment or event.
-  An alarm is set for this appointment.



## To schedule an appointment or event

1. From the Add menu, choose Appointment ((Alt) (A) (A)).  
-or-  
From the Add menu, choose Event ((Alt) (A) (E)).
2. Type an appointment or event description.
3. Fill in any of the other options listed below, then choose OK.

**Add Appointment / Event**

Description: \_\_\_\_\_

Type: ☒ Appointment ☐ Event

Start Time: 10:00AM End Time: 11:00AM

Start Date: 3/14/93 Calendar... Number of Days: 1

Location: \_\_\_\_\_

☒ Alarm Enabled

Leadtime: 0 Hr 5 Min

☒ View in Month ☒ View in Week

Repeat: None  
Change Repeat...

Note: \_\_\_\_\_

Save OK Cancel Help

### Hint

A fast way to schedule an appointment or event is to simply fill in the description line in the Appointment or Event area, then add the details later. This works only in Day view.

Just type a description on a blank line and press Enter.



**Appointment and Event Options**

| <u>Option</u>  | <u>Description</u>                                                                                                                                                                                              |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type           | Allows you to quickly change an appointment to an event—or an event to an appointment—by changing the type. If you switch from an event to an appointment, you'll need to fill in a start time and an end time. |
| Start Time     | Shows the starting time for the appointment. You can type or select a new time—for example, 11:15a.                                                                                                             |
| End Time       | Shows the ending time for the appointment. You can type or select a new time.                                                                                                                                   |
| Start Date     | Indicates the day of your appointment or event. You can type a new date or select one with the arrow keys.                                                                                                      |
| Calendar       | Displays the Calendar dialog box where you can easily select the Start date while scheduling.                                                                                                                   |
| Number of Days | Indicates if this appointment repeats on more than one day, type or select the number of consecutive days.                                                                                                      |
| Location       | Displays a location for an appointment or event.                                                                                                                                                                |
| Alarm Enabled  | Shows whether an alarm is set for the appointment.                                                                                                                                                              |
| Leadtime       | If an alarm is set, shows how many minutes before the appointment the alarm will sound. You can type or select any value between 0 and 23 hours, 59 minutes.                                                    |
| View in Month  | Shows whether the appointment or event is displayed in Month view.                                                                                                                                              |
| View in Week   | Shows whether the appointment or event is displayed in Week view.                                                                                                                                               |
| Change Repeat  | Displays the Repeat dialog box where you can schedule appointments or events that repeat on a regular basis. For complete information about scheduling repeating activities, see page 1-25.                     |
| Note           | Contains any additional information you type in the Note box. This field scrolls to provide as many lines as you want.                                                                                          |

## To schedule a task

1. From the Add menu, choose To-Do ((Alt) (A) (T)).
2. Type a description for the task in the description line—for example:  

Pick up laundry.
3. Fill in any of the other options listed below, then choose OK.

Check here if you want  
tasks not yet completed  
to carry over to the next  
day.

**Add To Do**

Description: Pick up laundry

Start Date: 4/29/93 Start Calendar...

Due Date: Due Calendar...

Priority: 1

☒ Carry Forward

Repeat: None  
Change Repeat...

Note:

Save OK Cancel Help

### Task Options

| Option         | Description                                                                                                                                                                                    |
|----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Start Date     | Indicates the day your task will appear in the To-Do list. You can type a new date, select one with the arrow keys, or choose Start Calendar and select a date.                                |
| Start Calendar | Displays a Calendar where you can quickly select the Start date while scheduling.                                                                                                              |
| Due Date       | Shows the date when this task should be completed. If you want the status column to show a symbol when the task is due tomorrow or is past due, include the Due Date when scheduling the task. |

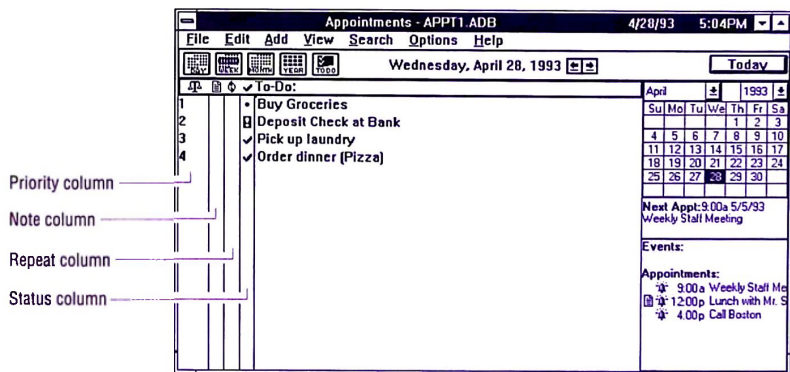
- Due Calendar** Displays a Calendar where you can quickly select the Due date while scheduling.
- Priority** Indicates the current priority of this task. For more about setting priorities, see page 1-10.
- Carry Forward** If you check this box, unfinished tasks carry forward to appear each day until you complete them. Completed tasks do not carry forward.
- Change Repeat** Displays the Repeat dialog box where you can schedule tasks that repeat on a regular basis. For more about scheduling repeating activities, see page 1-25.
- Note** Contains any information you want to type in the Note box. This field scrolls to provide as many lines as you want.

## To view your tasks

1. Double-click the To-Do button.

-or-

From the View menu, choose To-Do List (**Alt** **V** **T**).



## To check the status of your tasks

Each task on your To-Do list has a status symbol so you can quickly scan the list to see which tasks are new, due today, past due, or completed.

| This symbol | Means this                                                                                                                                                                           |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| •           | This is a new task (starts today). The new task symbol appears only on the scheduled start date. If the task both starts today, and is due today, the due today symbol is displayed. |
| !           | This task is due today. This symbol appears only if you have scheduled a due date.                                                                                                   |
| Ⓢ           | This task is past due. This symbol appears only if you have scheduled a due date.                                                                                                    |
| ✓           | This task is completed.                                                                                                                                                              |

## To prioritize your tasks

You can assign priority numbers and letters to your tasks so you can organize them in order of importance.

1. If the To-Do List is not displayed, click the To-Do button.  
—or—  
From the View menu, choose To-Do List (**Alt** **V** **T**).
2. Double-click the Priority column next to the task you want to prioritize.
3. Type the priority you want for this task, then choose OK.

You can choose any number from 0-99, any letter from A-Z, or any combination of a number and letter—for example, A1, A2, 1b, and so on. Tasks are sorted according to their priorities in the following order: number, number+letter, single letter, and finally, letter+number. For example, the priorities 1, 2, A, and A1 would be sorted as follows: 1, 2, A, A1.



---

## To check off a completed task

As you complete tasks on your To-Do list, you can check them off rather than delete them. This leaves a record of your activities, but there is no confusion about what you have and have not completed.

1. If your tasks are not displayed, click the To-Do button ((Alt) **V** **T**).
2. Double-click the Status column next to the task you want to check off.

-or-

From the Edit menu, choose Check Off To-Do Item ((Alt) **E** **O**).

A check mark (✓) appears next to the completed task and it moves to the bottom of your task list. If you check off a task in error, you can remove the check mark by double-clicking again.

---

## To print items from your schedule

1. From the File menu, choose Print ((Alt) **F** **P**).
2. In the Date Range box, type or select the time period you want to print.

Items scheduled outside these dates are not printed. You can type a date, select one with the edit keys, or display the calendar to select a date. If you want to see the calendar, choose the From This Date or To This Date button.

3. In the Print These Items box, check the items you want to print.
4. Choose any or all of the following options:

|                   |                                                                          |
|-------------------|--------------------------------------------------------------------------|
| New Page Each Day | Prints each day's activities on a new page.                              |
| Skip Blank Days   | Does not print days without scheduled activities                         |
| Print Footer      | Prints the name of the file and today's date at the bottom of each page. |

5. Choose OK to start printing.

Print all selected items between these two dates.

Select the items you want to print.

The screenshot shows a 'Print' dialog box with a title bar. Inside, it specifies the printer as 'HP DeskJet 500'. There is a 'Date Range' section with two date pickers: 'From This Date...' set to '3/21/93' and 'To This Date...' set to '4/21/93'. Below this are two columns of checkboxes. The first column, 'Print these Items', includes 'Events', 'Appointments', 'To Do', and 'Notes', all of which are checked. The second column, 'Options', includes 'New Page Each Day', 'Skip Blank Days', and 'Print Footer', all of which are also checked. At the bottom of the dialog are three buttons: 'OK', 'Cancel', and 'Help'.

| Print                                            |                                                       |
|--------------------------------------------------|-------------------------------------------------------|
| Printer: HP DeskJet 500                          |                                                       |
| Date Range                                       |                                                       |
| From This Date...                                | 3/21/93                                               |
| To This Date...                                  | 4/21/93                                               |
| Print these Items                                | Options                                               |
| <input checked="" type="checkbox"/> Events       | <input checked="" type="checkbox"/> New Page Each Day |
| <input checked="" type="checkbox"/> Appointments | <input checked="" type="checkbox"/> Skip Blank Days   |
| <input checked="" type="checkbox"/> To Do        | <input checked="" type="checkbox"/> Print Footer      |
| <input checked="" type="checkbox"/> Notes        |                                                       |
| OK                                               | Cancel Help                                           |

## Editing Your Schedule

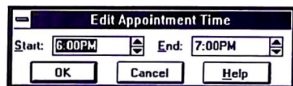
This section provides step-by-step procedures for editing appointments, events, and tasks, including the following:

- ▶ Changing the time of an appointment.
- ▶ Changing or adding an appointment alarm.
- ▶ Attaching a note to an appointment, event, or task.
- ▶ Deleting an appointment, event, or task.
- ▶ Copying or moving an appointment, event, or task.

---

### To change the appointment time

1. Double-click the time next to the appointment you want to change.  
-or-  
Tab to the Appointment area, use the arrow keys to select the time column, then press **Enter**.
2. Type or select a new Start or End time, then choose OK.



---

### To change the appointment alarm

1. Double-click the Alarm column (🔔) next to appointment or event.  
-or-  
Tab to the Appointment area, use the arrow keys to select the Alarm column, then press **Enter**.
2. Edit the alarm, then choose OK.



## To attach a note

You can attach a note to any scheduled item.

1. Double-click the Note column (📝) next to the item.

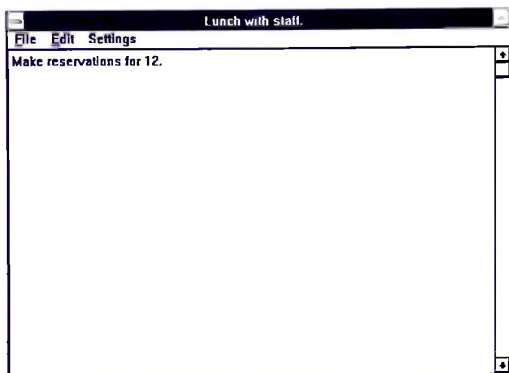
–or–

Tab to the Appointment area, use the arrow keys to select the note column, then press **(Enter)**.

The Appointment Book displays a dialog box where you can type or edit the Note. The title bar shows the description of the appointment, event, or task.

2. When finished reading or typing a note, choose Exit from the File menu to close the Note box.

If you have made changes, the Appointment Book prompts you to save them.



---

## To edit other details

You can use the following procedure to edit other schedule details—for example, location or due date.

1. Select the item you want to edit.
2. Double-click the item.  
-or-  
Press **Ctrl**+**Enter**.
3. Add or change the information as you like, then choose OK.

---

## To delete an item from your schedule

1. Display and select the appointment, event, or task you want to delete.
2. From the Edit menu, choose Delete (**Ctrl**+**D**).

If you delete an item in error, you can quickly recover it by choosing Undo from the Edit menu.

---

## To copy or move an appointment or event

You can use the Clipboard to copy and move appointments and events within the Appointment Book. You cannot copy and paste items between the Appointment screen and the To-Do screen.

1. Select the item you want to copy or move.
2. From the Edit menu, choose Copy (or press **Ctrl**+**C**).  
-or-  
To move the task instead of copying it, choose Cut (or press **Ctrl**+**X**).
3. Select the description line where you want to copy or move the item.
4. From the Edit menu, choose Paste (or press **Ctrl**+**V**).

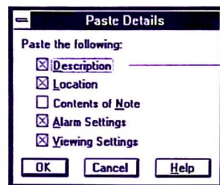
The Appointment Book copies or moves the appointment or event—along with all of the schedule details (except the time).

---

## To copy or move part of an appointment or event

You can choose to copy or move selected details of a scheduled item.

1. Select the item you want to copy or move.
2. From the Edit menu, choose Copy (**Ctrl**+**C**).  
-or-  
To move the item instead of copying it, choose Cut (**Ctrl**+**X**).
3. Select the description line where you want to copy or move the item.
4. From the Edit menu, choose Paste Details (**Alt** **E** **A**).
5. Clear the items you don't want to copy or move, then choose OK.



If you don't paste the description, the Appointment Book puts an ellipsis (...) in the description line.

---

## To copy or move a task

You can use the Clipboard to copy and move tasks within the Appointment Book. You cannot copy and paste items between the To-Do screen and the Appointments screen.

1. Select the task you want to copy or move.
2. From the Edit menu, choose Copy (**Ctrl**+**C**).  
-or-  
To move the task instead of copying it, choose Cut (**Ctrl**+**X**).
3. From the Edit menu, choose Paste (**Ctrl**+**V**).

The Appointment Book copies or moves the task and inserts it in the list according to its priority.

---

## To copy or move part of a task

You can choose to copy or move selected details of a task.

1. Select the task you want to copy or move.
2. From the Edit menu, choose Copy ((**C**trl)+(C)).  
-or-  
To move the item instead of copying it, choose Cut ((**C**trl)+(X)).
3. From the Edit menu, choose Paste Details ((**A**lt)+(E)+(A)).
4. Clear any items you do not want to copy or move.
5. Choose OK.

The Appointment Book copies or moves the task and inserts it in the list according to its priority.



---

## Getting from Here to There

There are many ways to navigate and change views in the Appointment Book. This section provides step-by-step instructions for moving around in the Appointment Book, including the following tasks:

- ▶ Using the Appointment Book navigation keys.
- ▶ Changing between Day, Week, Month, and Year views.
- ▶ Switching from a view of appointments and events to a view of tasks.
- ▶ Moving to a particular date.

---

### To move around in the Appointment Book

In addition to using the scroll bar and **(Tab)** to move around, you can use any of the following navigation keys in the Appointment Book.

#### To move

#### Press these keys

Up one line at a time.



Down one line at a time.



To the previous item—on this day or another.



To the next item—on this day or another.



To the previous *day* with scheduled items.



To the next *day* with scheduled items.



To today's date.



To the next day, week, month, or year.



To the previous day, week, month, or year.





---

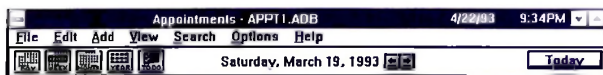
## To change views

The Appointment Book Toolbar provides buttons for changing views of your appointments and events—Day, Week, Month—as well as a Year view for checking a yearly calendar. The view you choose defines how your schedule looks on screen. The various views not only give you an overview of your schedule, but also let you quickly navigate to the other days, weeks, months, or years—or to a particular appointment or event.

- Click the appropriate button on the toolbar.

–or–

From the View menu, choose Day, Week, Month, or Year.



Appointment Book views

You can use the following Toolbar buttons to navigate in any view:

### To move to

### Do this

The previous day, week, month, or year

Click .

The next day, week, month, or year

Click .

Today's date

Click .

See the following pages for more about each Appointment Book view.

## Day View

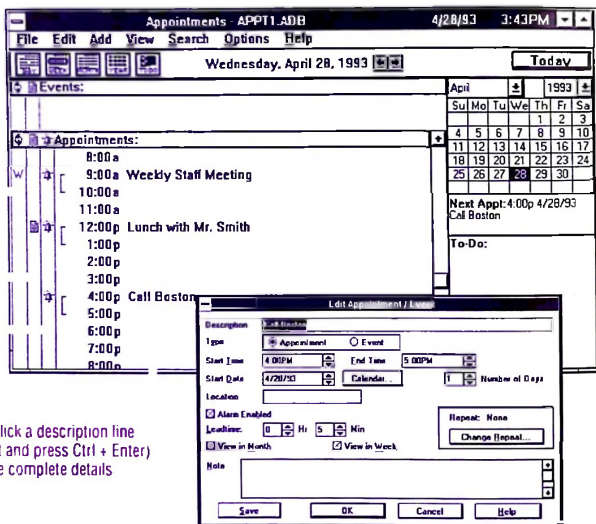
The Day view gives you a daily overview of your appointments and events. All scheduled appointments and events appear in this view. From the Day view, you can

- ▶ Schedule and edit appointments and events.
- ▶ Delete appointments and events.
- ▶ Quickly add or update the repeat status, note, alarm, or time.
- ▶ See the details of an appointment or event.

Double-click the column (or select it and press Enter) to do the following:

- Add or change the repeat status--*Day*, *Week*, *Month*, or *Year*.
- Add or edit the note.
- Add or edit the alarm.

Double-click a description line or (select and press Ctrl + Enter) to see the complete details

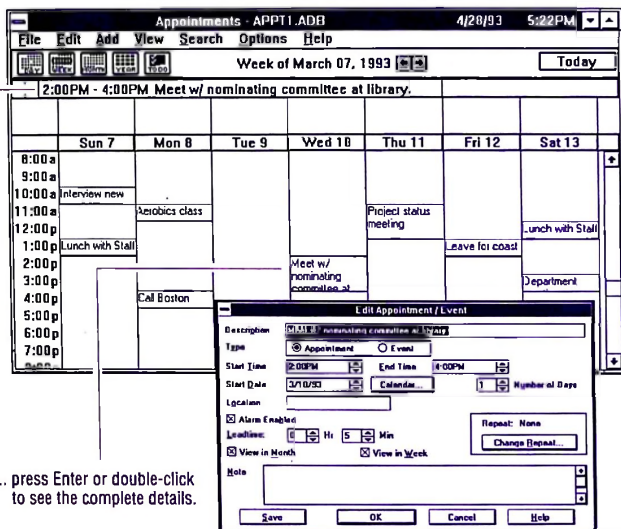


## Week View

The Week view gives you a weekly overview of your appointments and events. To see appointments and events in Week view, be sure to to check the View In Week option when scheduling the item. This is the Appointment Book default. From the Week view, you can

- ▶ Schedule and edit appointments and events.
- ▶ Delete appointments and events.
- ▶ See the details of an appointment or event.
- ▶ View the description and location without looking at the details.

Select an item to see the complete description line ...



## Month View

The Appointment Book displays the current month with scheduled appointments and events. To see appointments and events in Month view, be sure to check the View In Month option when scheduling the item. This is the Appointment Book default. From the Month view, you can

- ▶ See a short description of your appointments and events for the month.
- ▶ View a list of your appointments and events for a particular day.
- ▶ View a list of your tasks for a particular day.
- ▶ Display events only.

Double-click a day, or select a day and press Enter, to move to that day.

Select a day and then select ☒ to view your list of tasks.

Select a day and then select ☐ to view your list of appointments and events.

## To view events only

You can hide your appointments in this view and display events only.

- From the View menu, choose Events only.

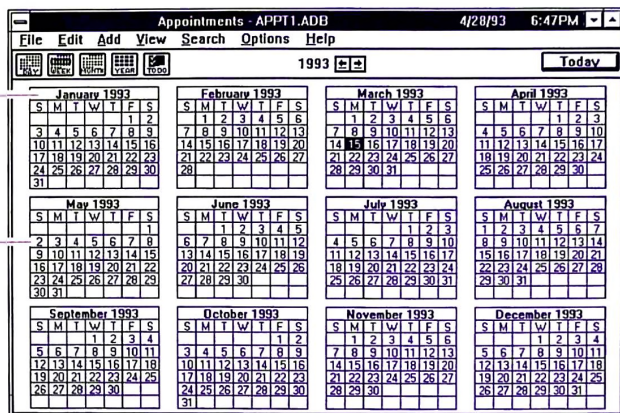
## Year View

The Year view shows you a yearly calendar where you can check dates or quickly jump to a particular month or day in the year. From the Year view, you can

- ▶ View a calendar of the year.
- ▶ Jump to any month in the year.
- ▶ Jump to any day in the year.

Double-click a month  
to move to that month ...

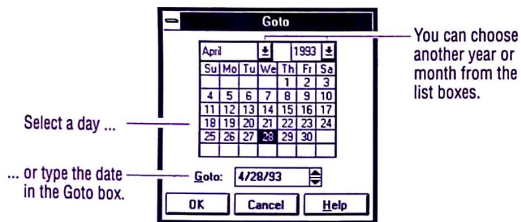
... or double-click a day  
to move to that day.



---

## To go to a different date

1. From the Search menu, choose Goto ((Alt) (S) (G)).
2. Select a day on the calendar.  
—or—  
Type or select a date in the Goto box.
3. Choose OK to go to the specified date and close the Goto dialog box.



---

## To find a text string

1. Display your appointments and events, or tasks, depending on which you want to search.
2. From the Search menu, choose Find ((Alt) (S) (F)).
3. Type the string of characters or text you want to search for.  
If you want to search the Note field, or match upper- and lower-case letters, mark either of these boxes.
4. Choose Forward to find the next occurrence of the text.  
—or—  
Choose Backward to find the previous occurrence of the text.

## Setting Up Repeating Activities

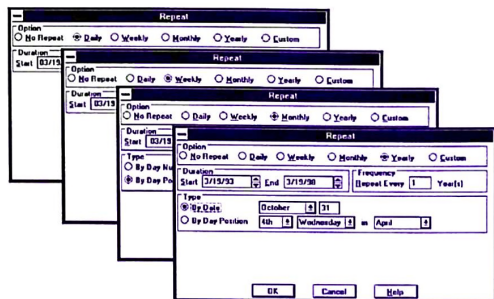
You may have some activities that repeat on a regular basis—for example, a weekly staff meeting, or maybe you settle your accounts on the 5th of every month. The Appointment Book conveniently lets you schedule such activities once rather than typing each one over and over. This section provides step-by-step instructions for setting up repeating appointments, events, or tasks, including the following:

- ▶ Scheduling daily, weekly, monthly, or yearly activities.
- ▶ Customizing a repeat activity.
- ▶ Editing a repeat activity.

### To schedule repeating activities

1. Schedule an appointment, event, or task.
2. Double-click in the Repeat column (\$) next to the activity.  
—OR—  
Select the Repeat column, then press **Enter**.
3. Select an option—Daily, Weekly, Monthly, Yearly, or Custom.
4. Fill in the repeat information for the option you selected, then choose OK.

See the examples on the following pages for detailed instructions about each repeat option.



## To schedule a daily task

**Example:** You call in your sales figures to the head office every day.

1. Schedule the task.
2. Double-click in the Repeat column (\$) next to the task.

-or-

Select the Repeat column, then press **Enter**.

3. Under Option, choose Daily.
4. If necessary, change the Start or End date.

By default, the range is 5 years from the current date.

5. Under Frequency, type how often the task repeats—in this case, type 1 because you call in every day.
6. Choose OK to close the Repeat dialog box.

**Repeat**

Option  
☐ No Repeat ☒ Daily ☐ Weekly ☐ Monthly ☐ Yearly ☐ Custom

Duration  
Start 03/19/93 End 12/31/93

Frequency  
Repeat Every 1 Days(\*)

OK Cancel Help

Task is scheduled to repeat every day from 03/19/93 to 12/31/93.



## To schedule a weekly appointment

**You have a weekly staff meeting every Wednesday at 9:00 am.**

1. Schedule your first staff meeting.
2. Double-click in the Repeat column (\$) next to the appointment.  
-or-  
Select the Repeat column, then press **Enter**
3. Under Option, choose Weekly.
4. If necessary, change the Start or End date.

By default, the range is 5 years from the current date.

5. In the Day of Week box, select the day the appointment is scheduled.
6. Choose OK to close the Repeat dialog box.

Option  
☐ No Repeat ☐ Daily ☒ Weekly ☐ Monthly ☐ Yearly ☐ Custom

Duration  
Start 4/27/93 End 4/27/98

Frequency  
Repeat Every 1 Week(s)

Day of Week Tuesday

OK Cancel Help

Appointment repeats  
once each week on  
Tuesday.

## To schedule a monthly appointment

**Example:** Your marimba band holds a regularly scheduled concert every *other* month.

1. Schedule your first concert.
2. Double-click in the Repeat column (\$) next to the appointment.
3. Under Option, choose Monthly.
4. If necessary, change the Start or End date.
5. Under Frequency, type 2 because your concerts occur every *2nd* month.
6. In the Type box, choose one of the following options:

By Day Number

With this option, you can choose to repeat the appointment according to a day's *date* in the month—for example, 5 if you play on the 5th of each month.

By Day Position

With this option, you can choose to repeat the appointment according to a day's *position* within the month—for example the 1st Monday, or last Friday.

7. Choose OK to close the Repeat dialog box.

Repeats every other month on the first Monday.

Repeat

Option  
☐ No Repeat ☐ Daily ☐ Weekly ☒ Monthly ☐ Yearly ☐ Custom

Duration  
Start 01/01/93 End 01/01/94

Frequency  
Repeat Every 2 Months(s)

Type  
☐ By Day Number  
☒ By Day Position 1st Monday

OK Cancel Help

## To schedule a yearly event

**Example: You want to set a reminder to file your tax return in April.**

1. Schedule the event.
2. Double-click in the Repeat column (🔁) next to the appointment.
3. Under Option, choose Yearly.
4. If necessary, change the Start or End date.

By default, the range is 5 years from the current date.

5. Under Frequency, type how often the event repeats, 1 for once per year.
6. In the Type box, choose one of the following options:

**By Date** With this option, you can choose to repeat the appointment according to a day's *date* in the year—for example, April 14.

**By Day Position** With this option, you can choose to repeat the appointment according to a day's *position* within the year—for example, the 1st Monday in April.

7. Choose OK to close the Repeat dialog box.

This event repeats on the 14th of April every year.

The screenshot shows the 'Repeat' dialog box. The 'Option' section has radio buttons for 'No Repeat', 'Daily', 'Weekly', 'Monthly', 'Yearly' (selected), and 'Custom'. The 'Duration' section has 'Start' as 04/14/93 and 'End' as 04/14/98. The 'Frequency' section has 'Repeat Every' as 1 and 'Year(s)'. The 'Type' section has radio buttons for 'By Date' (selected) and 'By Day Position'. Under 'By Date', the date is set to April 14. There are also empty fields for 'By Day Position'. At the bottom are 'OK', 'Cancel', and 'Help' buttons.

## To customize a repeat schedule

**Example:** Your parent/teacher meetings occur the 1st and 3rd Wednesday of every month *except* for the months of June, July, and August (summer vacation).

1. Schedule an appointment for your first parent/teacher meeting.
2. Double-click in the Repeat column (\$) next to the appointment.
3. Under Option, choose Custom.
4. If necessary, change the Start or End date.
5. In the Type box, choose one of the following options:

**By Day Number**

With this option, you can choose to repeat the appointment according to a day's *date* within the month—for example, the 1st day of January and July.

**By Day Position**

With this option, you can choose to repeat the appointment according to a day's *position* within the month—for example, the 1st and 2nd Monday of June and July.

6. In the Months box, select the months when the appointment occurs.
7. Choose OK to close the Repeat dialog box.

The meeting repeats on the 1st and 3rd Wednesday for each selected month.

**Repeat**

☐ Option  
☐ No Repeat ☐ Daily ☐ Weekly ☐ Monthly ☐ Yearly ☒ Custom

**Duration**  
Start: 01/06/93 End: 12/31/93

**Type**  
☐ By Day Number ☐  
☒ By Day Position

Week: ☒ 1st ☐ 2nd ☒ 3rd ☐ 4th ☐ Last  
Day: ☐ Mon ☐ Tue ☒ Wed ☐ Thur ☐ Fri ☐ Sat ☐ Sun

**Months**  
☒ January ☒ February ☒ March ☒ April ☒ May ☐ June  
☐ July ☐ August ☒ September ☒ October ☒ November ☒ December

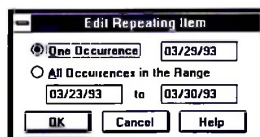
OK Cancel Help

---

## To edit a repeating item

You can edit one, several, or all occurrences of a repeating item.

1. Select the item you want to edit.
2. From the Edit menu, choose Item Details ((Alt) (E) (I)).
3. Edit the details as you like, then choose OK.
4. Select one of the following options, then choose OK.



---

| Select this     | To do this                                                                                    |
|-----------------|-----------------------------------------------------------------------------------------------|
| One Occurrence  | Edit one occurrence. Type a new date, if necessary.                                           |
| All Occurrences | Edit all occurrences within the range you specify. The displayed date range is all-inclusive. |

---

---

## To delete a repeating item

You can delete one, several, or all occurrences of a repeating item.

1. Select the item you want to delete.
2. From the Edit menu choose Delete (or press (Ctrl)+(D)).
3. Select one of the following options, then choose OK.

---

| Select this     | To do this                                                                                      |
|-----------------|-------------------------------------------------------------------------------------------------|
| One Occurrence  | Delete one occurrence. Type a new date, if necessary.                                           |
| All Occurrences | Delete all occurrences within the range you specify. The displayed date range is all-inclusive. |

---

## Don't Be Late: Setting Alarms

With the Appointment Book's alarm feature, you can set alarms to remind you of important appointments. This section provides step-by-step procedures for using alarms, including the following:



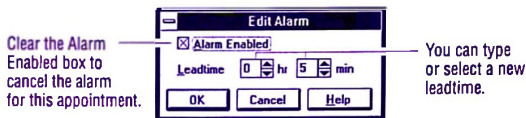
- ▶ Setting an alarm as an appointment reminder.
- ▶ Setting an alarm to run a program.
- ▶ Answering, clearing, and resetting alarms.
- ▶ Setting snooze alarms.
- ▶ Silencing alarms.

### To set an alarm as an appointment reminder

You can set an alarm when scheduling an appointment—the Appointment Book default—or you can add the alarm later. Alarms will sound regardless of the application you are running, or even if the computer is shut off.

1. From the View menu, choose Day (**Alt** **V** **D**).
2. Double-click the Alarm column (**A**) next to the appointment requiring an alarm.

The Appointment Book displays the Edit Alarm dialog box.



3. Check the Alarm Enabled box. If you want, you can type or select a new leadtime. The leadtime indicates how far ahead of the appointment the alarm will sound. For example, if you set a 15 minute leadtime for your 10:00 o'clock appointment, the alarm will sound at 9:45.
4. Choose OK to set the alarm and close the dialog box.

---

## To set an alarm to run a program

You can use an Appointment Book alarm to start and run a program. For example, you could create a simple batch file to back up your sales and price updates from your drive C to a flash disk. And you could do this automatically every morning at 3:00 am. To create the batch file, just use Notepad to create a new file. Then type each MS-DOS command as you want it executed. Name the file with the .BAT extension, and you can then schedule it to run with an Appointment Book alarm. The following sample file is named BACKUP.BAT.

```
copy c:\sales\*. * a:\sales
copy c:\updates\*. * a:\updates
```

For more information about creating MS-DOS batch files, see chapter 10 of the *OmniBook Operating Guide*.

1. Go to the day and time you want to schedule.
2. From the Add menu, choose Add Appointment (**Alt** **A** **A**).
3. In the Description field, type | followed by the name of the program. Be sure to include a valid path name. For example:

```
|C:\BACKUP.BAT
```

4. Check to make sure that the alarm is enabled.

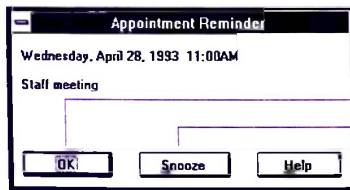
If you include a *leadtime*, the program will start at the specified leadtime. If you want the program to start at the *scheduled* time, set the leadtime to zero.

5. Choose OK to schedule the program and close the dialog box.

## To answer an alarm

Each time an alarm *rings*, the Appointment Reminder dialog box displays the appointment date, time, description, and location (if available).

- To cancel the alarm, choose OK.  
-OR-  
To reset the alarm to ring again, choose Snooze. The length of time between *snooze* alarms is usually 5 minutes. To change the snooze interval, see the procedure on page 1-35, "To set the snooze alarm."



OK cancels the alarm.

Snooze resets the alarm to ring again at a later time.

## To silence all alarms

By default, the Appointment Book alarm beeps and displays a dialog box when an alarm rings. If you would like to silence the alarm—during a meeting, for example—you can set the sound to None in the Defaults dialog box. This silences *all* alarms in the Appointment Book in all applications *except* MS-DOS. You cannot prevent alarms from sounding when you are working in MS-DOS.

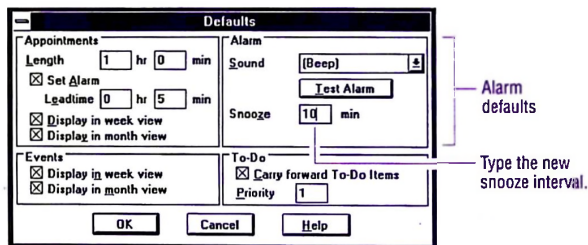
1. From the Options menu, choose Defaults ((Alt) O D).
2. In the Sound box, select None.
3. Choose OK to change the alarm sound and close the dialog box.



## To set the snooze alarm

You can use this procedure to set the timeout interval between snooze alarms.

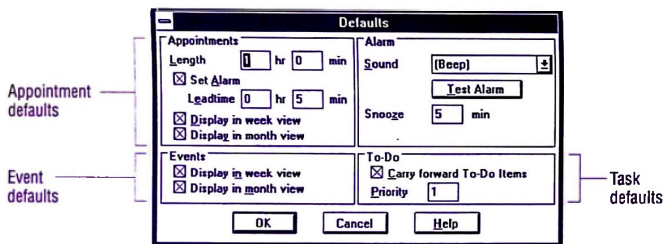
1. From the Options menu, choose Defaults ((Alt) **O** **D**).
2. In the Snooze box, type the number of minutes you want between alarms—any value between 1 and 99 minutes.
3. Choose OK to set the snooze alarm and close the dialog box.



# Setting Appointment Book Defaults

The Options menu provides a number of ways for you to customize appointments, events, and tasks. You can also change the display settings. This section provides step-by-step procedures for customizing the Appointment Book, including the following:

- ▶ Setting appointment defaults.
- ▶ Setting event defaults.
- ▶ Setting task defaults.
- ▶ Customizing the display.



## More about Defaults

The defaults you set for appointments, events, and tasks are the *initial* settings for each new item you schedule. You can easily change the settings for any individual item when you create or edit the task.

---

## To set appointment defaults

1. From the Options menu, choose Defaults (**Alt** **O** **D**).
2. Under Appointments, select or change any of the following default options, then choose OK.

| <u>Choose this option</u> | <u>To do this</u>                                                                                                                                                                                                                                                            |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Length                    | Change the initial length of a new appointment. When you first start the Appointment Book, the standard length of an appointment is 1 hour. If your appointments are normally longer or shorter than this, you can change the default—for example, to 30 minutes or 2 hours. |
| Set Alarm                 | If checked, the alarm is set automatically for each new appointment.                                                                                                                                                                                                         |
| Leadtime                  | Set the initial alarm leadtime for a new appointment (in hours and minutes).                                                                                                                                                                                                 |
| Display In Week View      | If checked, each new appointment is set to appear in Week view.                                                                                                                                                                                                              |
| Display In Month View     | If checked, each new appointment is set to appear in Month view.                                                                                                                                                                                                             |

---

## To set event defaults

1. From the Options menu, choose Defaults (**Alt** **O** **D**).
2. Under Events, select or cancel either of the following default options, then choose OK.

| <u>Choose this option</u> | <u>To do this</u>                                          |
|---------------------------|------------------------------------------------------------|
| Display In Week View      | If checked, each new event is set to appear in Week view.  |
| Display In Month View     | If checked, each new event is set to appear in Month view. |

## To set task defaults

1. From the Options menu, choose Defaults ((Alt) (O) (D)).
2. Under To-Do, select or change any of the following default options, then choose OK.

### Choose this option

Carry forward To-Do  
Items

Priority

### To do this

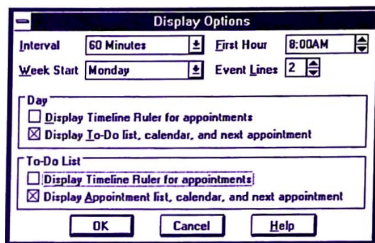
If checked, each new task is set to carry over to following days. Tasks carry forward until you check them completed.

Type a default priority for your tasks. You can choose any number from 0-99, any letter from A-Z, or any combination of a number and letter. Each new task you schedule will have this default priority. You can change the priority at any time when you create or edit the task.

## To customize the Appointment Book display

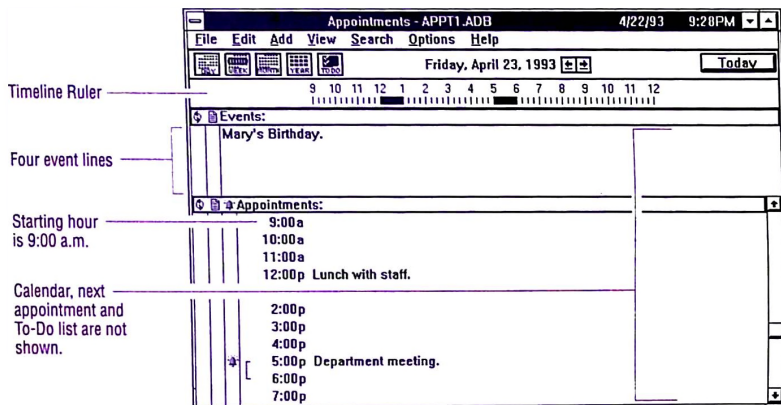
You can change how appointments, events, and tasks appear in the Appointment book with the following procedure.

1. From the Options menu, choose Display Options ((Alt) (O) (O)).
2. Select any of the following display options, then choose OK.



| <u>Choose this option</u>                                | <u>To do this</u>                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interval                                                 | Change the time intervals displayed in your Day and Week views. You can choose to display only the scheduled times for existing appointments (Appointments Only)—or, regular time-periods (9:15, 10:30, 12:00) at intervals of 15, 30, or 60 minutes. You cannot set irregular times, for example, 8:11 or 2:47. Also, the interval must match the first hour format. If you want a first hour of 9:15, the interval must be set at 15 minutes. |
| First Hour                                               | Change the first hour shown in your Day and Week views.                                                                                                                                                                                                                                                                                                                                                                                         |
| Week Start                                               | Specify the start day—Monday or Sunday—for all Appointment Book calendars.                                                                                                                                                                                                                                                                                                                                                                      |
| Event Lines                                              | Change the number of event lines shown in your Day and Week views.                                                                                                                                                                                                                                                                                                                                                                              |
| Display Timeline Ruler for appointments                  | Hide or display the Timeline Ruler in the Day or To-Do views. When displayed, the Timeline Ruler appears at the top of your Appointment Book screen. It shows those portions of a day blocked by appointments.                                                                                                                                                                                                                                  |
| Display To-Do list, calendar, and next appointment       | In the To-Do view, hide or display the Calendar, next scheduled appointment, and the list of all tasks for the selected day.                                                                                                                                                                                                                                                                                                                    |
| Display Appointment list, calendar, and next appointment | In the Day view, hide or display the Calendar, the next scheduled appointment, and the list of all appointments and events for the selected day.                                                                                                                                                                                                                                                                                                |

The following picture illustrates some new, changed display options.



# Managing Your Appointment Book Files

This section provides step-by-step procedures for working with multiple Appointment Book files, including the following:

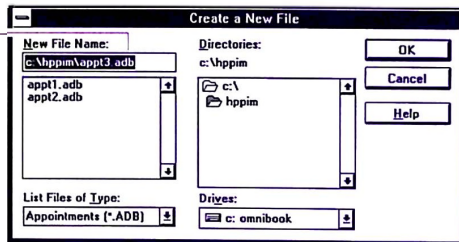
- ▶ Creating a new appointment book file.
- ▶ Opening other appointment book files, including HP 95LX and HP 100LX files.
- ▶ Merging two appointment book files.
- ▶ Extracting scheduled items from one file to another.
- ▶ Removing (deleting) scheduled items from a file.

## To create a new Appointment Book file

1. From the File menu, choose New ((Alt) (F) (N)).
2. Type a name for the new file, or use the default name provided.
3. Choose OK to create the new file.

Any changes you made to the current file are saved automatically.

The Appointment Book creates a default file name for you.



---

## To open another Appointment Book file

You can use this procedure to open another OmniBook Appointment Book file.

1. From the File menu, choose Open ((Alt) (F) (O)).
2. Select the file you want to open.

If you do not see the name of the file you want, select a new drive or directory, or select a new file type.

3. Choose OK to open the file you selected.

Any changes you made to the current file are saved automatically.

---

## To open an HP 100LX file

1. Copy the HP 100LX Appointment Book file to your OmniBook. You can use one of these methods:
  - On the HP 100LX, copy the file to a plug-in card, then insert the card in your OmniBook.
  - Use an HP 100LX Connectivity Pack to copy the file to your PC, then use a LapLink Remote connection to move the file from the PC to your OmniBook. If you need help doing this, see chapter 2 in the *OmniBook Operating Guide*.
2. From the File menu, choose Open ((Alt) (F) (O)).
3. Select the HP 100LX file you want to open, then choose OK.



---

## To open an HP 95LX appointment file

1. Copy the HP 95LX Appointment Book file to your OmniBook. You can use one of these methods:
  - On the HP 95LX, copy the file to a RAM card (or to an HP 95LX flash card), then insert the card in your OmniBook.
  - Use an HP 95LX Connectivity Pack to copy the file to your PC, then use a LapLink Remote connection to move the file from the PC to your OmniBook. If you need help doing this, see chapter 2 in the *OmniBook Operating Guide*.
2. From the File menu, choose Open (**Alt** **F** **O**).
3. Under List Files Of Type, select 95LX Appts.
4. Select the HP 95LX file you want to open, then choose OK.

The Appointment Book prompts you to confirm that you want to translate this file to OmniBook Appointment Book format.

5. Choose OK to continue with the conversion.

The Appointment Book converts the HP 95LX file, giving it the name you specify (with the default extension .ADB). This can take several minutes.

---

## To copy an Appointment Book file

1. From the File menu, choose Copy (**Alt** **F** **C**).
2. Type a file name in the Copy File To box, then choose OK.

The Appointment Book adds the .ADB extension for you.

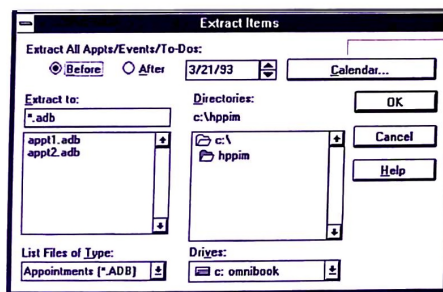
## To extract information and save it in a new file

Use this task to make a copy—in another file—of appointments, events, and tasks that fall within a particular date range. This task does not delete any information from the current file.

1. From the File menu, choose Extract ((A)lt (F) (E)).
2. Choose Before or After, then select the date before which or after which you want to extract items.
3. In the Extract To box, type the name of the file where the extracted items will be copied.

If this file exists, the Appointment Book asks if you want to overwrite the current file. Answering OK *deletes* information previously in that file.

4. Choose OK to copy the items and close the dialog box.



You can choose a date from the calendar if you like.

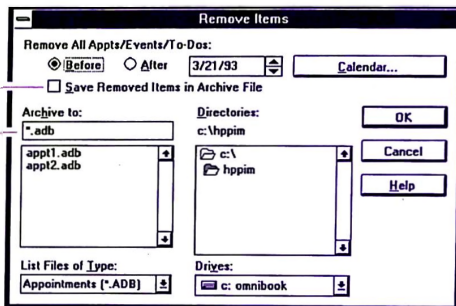
## To remove (delete) scheduled information

It is a good idea to clean up your Appointment Book from time to time to save disk and memory space. You may also want to archive (save to a file) the items you delete—for example, once each quarter.

1. From the File menu, choose Remove (**Alt F R**).
2. Choose Before or After, then type the date before which—or after which—you want to delete appointments, events, or tasks.
3. If you want to save a copy of the deleted items in a file:
  - Check the Save Removed Items In Archive File box.
  - Under Archive To, type a file name.
4. Choose OK to delete all items in the specified range.

Select this box to  
save the removed  
items ...

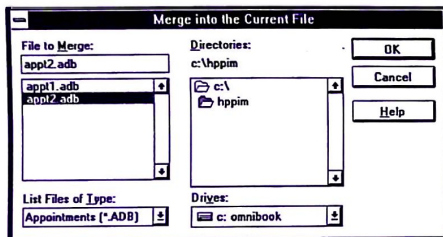
... then type a name  
for the archive file.



## To merge two Appointment Book files

1. Open the Appointment Book file to which you want to add another file.
2. From the File menu, choose Merge (**A**lt **F** **M**).

The Appointment Book merges the scheduled items into the current file and sorts them according to the date and time. If you have any duplicate items, they will appear twice in the current file. The Appointment Book does not detect or manage duplicate entries.



# Appointment Book Commands

1

| File menu command | Description                                                                                                                                                                                                                                 |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| New               | Creates a new file with the default extension .ADB. When a new file is created, the Appointment Book saves the current file automatically.                                                                                                  |
| Open              | Displays the standard dialog box that lets you open existing files that may be located in different directories or on different storage devices. When opening an existing file, the Appointment Book saves the current file automatically.  |
| Copy              | Displays a dialog box that lets you save the current file under a new name, in the same or in a different directory.                                                                                                                        |
| Merge             | Merges the contents of a selected file with the currently opened file, and sorts the merged records according to date, time, and priority.                                                                                                  |
| Extract           | Displays a dialog box where you can choose to copy all items before a specified date, or all items after a specified date—exclusive of the date specified. Extract does not alter the Appointment Book records in any way.                  |
| Remove            | Displays a dialog box where you can choose to delete all items before a specified date, or all items after a specified date—exclusive of the date specified. Additionally, you can choose to archive the deleted items to a specified file. |
| Password          | Displays a dialog box prompting you for a password to protect the current file. The associated file can then only be opened by typing the password.                                                                                         |
| Print             | Prints the current file at the currently selected printer. First displays a dialog box where you can select which items to print, and for which time period. The date range you specify is all inclusive.                                   |

| File menu command    | Description                                                                                                                                                                                    |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Printer Setup        | Displays the standard dialog box that allows you to switch from one printer connection to another, and to specify settings for the selected printer.                                           |
| Exit                 | Exits the Appointment Book application. When you exit, the Appointment Book saves the current file automatically.                                                                              |
| Edit menu command    | Description                                                                                                                                                                                    |
| Item Details         | Displays the Edit dialog box where you can edit or view the current appointment, event, or task. This is the same as selecting, then double-clicking on the item.                              |
| Undo                 | Reverses (in most cases) the last editing command—for example, delete, add, cut, copy, or paste.                                                                                               |
| Cut                  | Removes the selected item or text and places it on the Clipboard.                                                                                                                              |
| Copy                 | Copies the selected item or text and places it on the Clipboard.                                                                                                                               |
| Paste                | Copies the contents of the Clipboard to the current cursor location (for an appointment) or to the bottom of the list (for an event or task).                                                  |
| Paste Details        | Displays a dialog box where you can select parts of an item stored in the Clipboard. Only the selected parts will be pasted into the Appointment Book.                                         |
| Delete               | Deletes the selected items or text. Use Undo to quickly restore any items deleted in error.                                                                                                    |
| Check Off To-Do Item | Puts a check mark next to the currently selected task in the To-Do list, or removes the check mark if already present. This is the same as double-clicking the status column next to the task. |

| Add menu command  | Description                                                                                                                                                                      |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appointment       | Opens the Add Appointment dialog box where you can enter a new appointment. This is the same as selecting, then double-clicking on a blank time-slot in your Appointments list.  |
| Event             | Opens the Add Event dialog box where you can enter a new event. This is the same as selecting, then double-clicking on the last blank line in your Events list.                  |
| Tb-Do             | Opens the Add Tb-Do dialog box where you can enter a new item for your task list. This is the same as selecting, then double-clicking on the last blank line in your Tb-Do list. |
| View menu command | Description                                                                                                                                                                      |
| Day               | Displays appointments and events for the selected day.                                                                                                                           |
| Week              | Displays appointments and events for the selected week.                                                                                                                          |
| Month             | Displays appointments and events for the selected month.                                                                                                                         |
| Year              | Displays a yearly calendar for the selected year.                                                                                                                                |
| Tb-Do List        | Displays the task list for the selected day.                                                                                                                                     |
| Events Only       | In Month view, shows only scheduled events and no appointments. Unless you're in Month View, the Events Only command is greyed on the View menu.                                 |

| Search menu command  | Description                                                                                                                                                                             |
|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Next Day With Items  | Displays the next day with items scheduled.                                                                                                                                             |
| Prev Day With Items  | Displays the previous day with items scheduled.                                                                                                                                         |
| Next Item            | When viewing a list, this option moves the cursor to the next appointment, event, or task (on this day or another).                                                                     |
| Prev Item            | When viewing a list, this option moves the cursor to the previous appointment, event, or task (on this day or another).                                                                 |
| Goto                 | Go to a specified date. Type the date you want to go to or use the calendar to select a date.                                                                                           |
| Today                | Go to the current date. This is the same as clicking the Today button on the Toolbar.                                                                                                   |
| Find                 | Searches the Appointment Book for a specified string of text.                                                                                                                           |
| Repeat Last Find     | Searches the Appointment Book for the last specified string of text, in the direction of the last search. Finds the next occurrence of this string beginning from the current location. |
| Options menu command | Description                                                                                                                                                                             |
| Display Options      | Displays a dialog box where you can change the default display options for the Appointment Book.                                                                                        |
| Defaults             | Displays a dialog box where you can change the alarm, appointment, event, and To-Do defaults.                                                                                           |



| Help menu command | Description                                                                                                                                                                                                                                            |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contents          | Opens a Help window and displays a list of main topics. For help on a topic, select a topic, and then press <b>(Enter)</b> . When you press <b>(F1)</b> for help, you'll get context-sensitive help about the current command, dialog box, or message. |
| Keyboard          | Opens a Help window and displays information about the Appointment Book keyboard.                                                                                                                                                                      |
| Using Help        | Opens a Help window and displays instructions for using Help.                                                                                                                                                                                          |
| About             | Displays a window displaying the Appointment Book version number and copyright information.                                                                                                                                                            |

---

## Appointment Book Keyboard Shortcuts

Once you're familiar with the Appointment Book menus, you'll find that there are keyboard shortcuts that let you move around and perform tasks more quickly.

This section describes the following:

- ▶ Keyboard shortcuts.
- ▶ Navigation keys.

---

### To use the Appointment Book keyboard shortcuts

You can use these keyboard shortcuts to perform some tasks faster.

#### To do this

#### Press these keys

Get help for the selected command or opened dialog box. **(F1)**

Find a text string. **(Ctrl)+(F)**

Repeat the last Find command. **(F3)**

Print Appointment Book items. **(Ctrl)+(P)**

Undo the last editing command. **(Ctrl)+(Z)**

Cut an item from the Appointment Book to the Windows Clipboard. **(Ctrl)+(X)**

Copy an item from the Appointment Book to the Windows Clipboard. **(Ctrl)+(C)**

Paste from the Windows Clipboard to the Appointment Book or to another application. **(Ctrl)+(V)**

Exit the Appointment Book. **(Alt)+(F4)**

## To use the Appointment Book navigation keys

In addition to using the scroll bar and **Tab** to move around, you can use any of the following navigation keys in the Appointment Book.

### To move

### Press these keys

Up one line at a time.



Down one line at a time.



To the previous item—on this day or another.



To the next item—on this day or another.



To the previous *day* with scheduled items.



To the next *day* with scheduled items.



To today's date.



To the next day, week, month, or year.



To the previous day, week, month, or year.

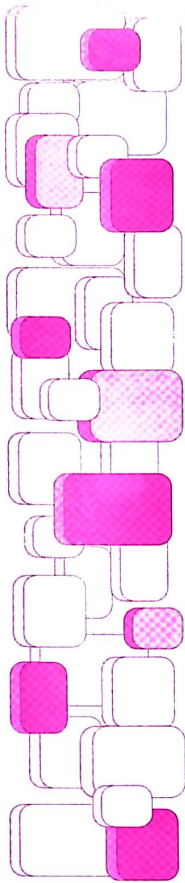


To a specified day.



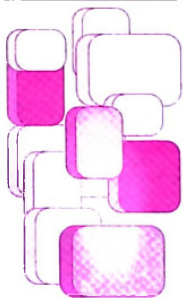
Using the Appointment Book  
**Appointment Book Keyboard Shortcuts**





---

## Part 2: Phone Book



---

# Phone Book

The Phone Book on your OmniBook is the second part of your Information Management package. Like the other OmniBook applications, the Phone Book uses windows, menus, and Toolbar buttons similar to those found in Microsoft Windows applications.

You should understand Windows fundamentals before you begin working with the Phone Book. If you need a quick review, you can refer to chapter 5, "Using Windows," in the *Operating Guide*, or chapter 2, "Using Microsoft Windows on Your OmniBook," in the *Quick Start Guide*.

---

 Using the Phone Book

---

# Using the Phone Book

2

## In This Chapter

The Phone Book is an easy-to-use database that provides a convenient place for you to record names, addresses, telephone numbers, and other pertinent information about the people and companies with whom you do business. Once you have stored the information, you can quickly access it from any application with only a few clicks of the mouse. In this chapter you'll learn how to

- ▶ Store records in the Phone Book database.
- ▶ Find and display Phone Records.
- ▶ Save time searching by creating subsets of the Phone Book.
- ▶ Customize the display to meet your special needs.
- ▶ Work with multiple Phone Book files.
- ▶ Perform tasks faster with keyboard shortcuts.



## Storing Records in the Phone Book

The Phone Book application provides a set of predefined fields to store information about people and businesses. All you do is enter the names, phone numbers, or any other information you want to save. This section provides step-by-step procedures for storing Phone Book records, including the following:

- ▶ Starting the Phone Book.
- ▶ Adding names to the Phone Book.
- ▶ Editing Phone Book records.
- ▶ Copying and deleting Phone Book records.
- ▶ Printing Phone Book records.

2

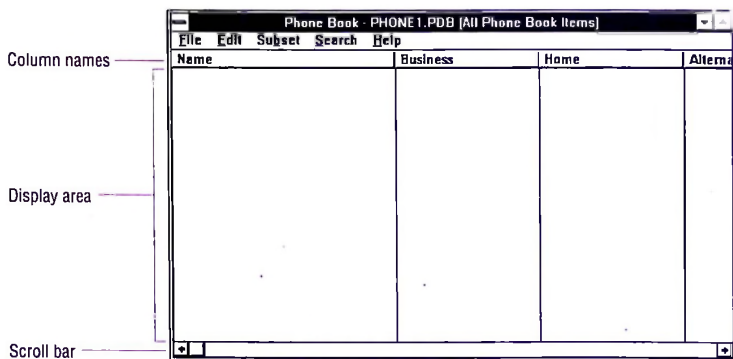
### To start the Phone Book

- Press **Fn**+**F4**

–or–

From Program Manager, double-click the Phone Book icon.

The Phone Book displays a list of Phone Book records—or, a blank display if you have not recorded any information. Use the scroll bar to see more columns.



## To add a record to the Phone Book

You can add up to 2,500 Phone Book records to each Phone Book file.

1. From the Edit menu, choose Add New Item (or press **(F2)**).
2. In the Name box, type a name.

Be sure to type the last name first—for example, Smith, John because the Phone Book sorts names alphabetically.

3. Fill in any other information you want to save.
4. If you want to add several records, choose Save.

—or—

If you want to add only one record, choose OK.

After filling in the address information, choose Save to save the record and add another ...

... or choose OK to save the record and close the Add dialog box.

**Add New Item**

Name:

Phone: Business  Home

Alternate  Fax

Title  Category

Company

Address1

Address2

City  State  Zip

Note

## To create a category for a record

The Category field is a field where you can categorize records with a special name or code that you choose. The Phone Book has two built-in categories defined for you: *Business* and *Personal*. You can choose one of these or create your own. Information in the Category field of a record is often used to sort records (see page 2-21) or to define a subset of records (see page 2-14).

1. When adding (or editing) a record, choose one of the predefined categories.  
-or-  
Type a new category of your own.

2. Choose OK to create the category and close the dialog box.

The Phone Book creates the category and adds it to the list where you can select it when adding records.

**Add New Item**

Name: Coffin, Dan

Phone: Business: [790] 541-8476 Home: [790] 543-2223

Alternate: [791] 541-0880 Fax:

Title: Engineer Category: business

Company: MacKenzie Associates

Address1: 4325 56th Place NE

Address2:

City: Monroe State: OR Zip: 46123

Note:

Buttons: Save OK Cancel Help

Choose a category from the list or type a new one of your choice.

## To delete a category

1. From the Edit menu, choose Delete Categories ((Alt) (E) (G)).
2. Select one or more categories to delete, and choose OK.

The Phone Book deletes the selected category from the *category list*. It does not delete this category from any of the records that contain it.



The Phone Book creates categories when you add and edit records. Deleting a category doesn't update or change your records, so if you open a record still containing this category, and then close it with OK, the Phone Book recreates it. If you don't want to recreate the category, close the record with Cancel.

### More about Categories

You are limited in the number of categories you can create for each file. The *total* number of characters for all category names combined (including spaces), cannot exceed 255 characters. If you reach this limit, the category will be saved with the record, but not added to the Category list. To add another category to the list, you must delete one or more categories—or create a new Phone Book file.

## To move around in the Phone Book

In addition to using the scroll bar to move around, you can use any of the following navigation keys in the Phone Book.

### To move

- Up one record in the list.
- Down one record in the list.
- To the top of the list.
- To the bottom of the list.
- To the first column in a record.
- To the last column in a record.
- One column to the right.
- One column to the left.
- Up one page at a time.
- Down one page at a time.
- Right one page at a time.
- Left one page at a time.

### Press these keys

- ▲
- ▼
- Home
- End
- Ctrl+◀
- Ctrl+▶
- ▶
- ◀
- PgUp
- PgDn
- Ctrl+PgDn
- Ctrl+PgUp

Each column is a  
Phone Book field.

Each line is a  
Phone Book record.

| Phone Book - PHONE1.PDB [All Phone Book Items] |                |                |        |      |
|------------------------------------------------|----------------|----------------|--------|------|
| File                                           | Edit           | Subject        | Search | Help |
| Name                                           | Business       | Home           | Alt    |      |
| Chateau, Annie                                 | (441) 903-5853 | (441) 907-4777 |        |      |
| Coffin, Donald                                 | (223) 773-8812 | (223) 775-6590 |        |      |
| Leeken, Rufus                                  | (441) 907-5938 | (441) 911-2121 |        |      |
| Roar, Scott                                    | 34-3-589-4879  | 34-3-447-5767  |        |      |
| Schroeder, Henry                               | (821) 366-5839 | (821) 365-3112 |        |      |

## To edit a phone record

1. Double-click the record you want to update.  
-or-  
Move the cursor to the record you want, then press **Enter**.
2. Make any changes you want to the record.
3. Choose OK to update the record and close the dialog box.

**Edit Current Item**

Name: Coffin, Donald

Phone: Business [223] 773-8812 Home [223] 775-6590

Alternate [ ] Fax [ ]

Title Engineer Category business ±

Company [ ]

Address1 4325 56th Place NE

Address2 P.O. Box 500

City Monroe State OR Zip 94959

Note Baby due in September. Get shower gift. ±

<< Prev Next >> Save OK Cancel Help

Select a button to save the current changes and edit the previous or next record.

## To copy a phone record

You can save time by using the Copy and Paste commands to make duplicate phone records that you can then edit.

1. Select one or more records to copy.
2. From the Edit menu, choose Copy (or press **Ctrl+C**).  
-or-  
To move the item instead of copying it, choose Cut (or press **Ctrl+X**).
3. To insert the copy into your phone records, from the Edit menu choose Paste.

## To delete a phone record

1. From the phone list, select the record you want to delete.

You can select multiple records by holding down **(Ctrl)** and clicking each record.

2. From the Edit menu, choose Delete (or press **(Del)**).

### Hint

If you delete an item in error, you can quickly restore it by choosing Undo from the Edit menu.

Hold down Ctrl and click each record you want to delete.

| Phone Book - PHONE1.PDB (All Phone Book Items) |                |                |             |
|------------------------------------------------|----------------|----------------|-------------|
| File                                           | Edit           | Subset         | Search Help |
| Name                                           | Business       | Home           | Alt         |
| Chateau, Annie                                 | (441) 903-5853 | (441) 907-4777 |             |
| Coffin, Donald                                 | (223) 773-8812 | (223) 775-6590 |             |
| Leiken, Rulus                                  | (441) 907-5938 | (441) 911-2121 |             |
| Rear, Scott                                    | 34-3-589-4879  | 34-3-447-5767  |             |
| Schroeder, Henry                               | (821) 365-5839 | (821) 365-3112 |             |

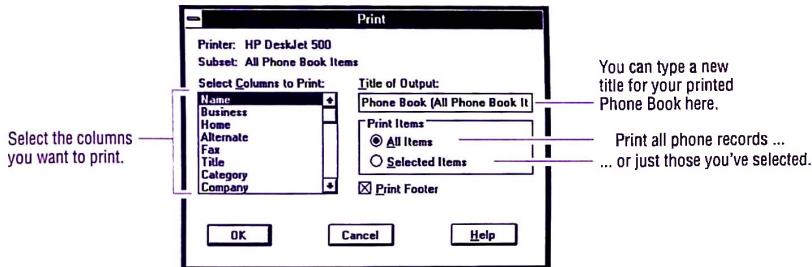
---

## To print your Phone Book

1. From the File menu, choose Print (or press **(Ctrl)+(P)**).
2. In the Select Columns To Print box, select the columns you want to print.
3. Under Print Items, select All Items.

All Items does not mean all columns. The Phone Book prints the *selected columns* for all records in your Phone Book.

4. Choose OK to print the records you selected.



---

## To print selected records

1. From the phone list, select the records you want to print.

You can select multiple records by holding down **(Ctrl)** and clicking each record.

2. From the File menu, choose Print (**(Alt)+(F)+(P)**).
3. In the Fields to Print box, select the fields you want to print.
4. In the Print Records box, select Selected Records.
5. Choose OK to print the records you selected.



# Finding and Displaying Phone Records

With the Phone Book, you can quickly find and display a name, a text string, or a group of related records—for example, all the names of employees who work for a particular company. This section provides step-by-step procedures for finding and displaying Phone Book records, including the following:

- ▶ Searching for a particular record.
- ▶ Searching for a text string.

2

## To find a record in the Phone Book

You can use the *Fast Goto* feature to quickly find and move to a particular record in the Phone Book.

1. Just start typing the first characters of the record you want to find.

The cursor moves to that record as you type. The more characters you type, the more narrow your search.

2. Press **Enter** when the record you want is selected.

The Fast Goto command searches the *first* column displayed on your screen, beginning with the first character. If you move the first column to another position, it will still be the first column searched. If you want to search another column, move it to the first position, then exit and restart the Phone Book.

Start typing a name ...

... and the cursor moves to the name as you type it.

|                  |                |                                |      |     |
|------------------|----------------|--------------------------------|------|-----|
| Fast Goto        |                | IE1.PDB [All Phone Book Items] |      |     |
| Locating:        | P              | Business                       | Home | Alt |
| Chateau, Annie   | (441) 903-5853 | (441) 907-4777                 |      |     |
| Coffin, Donald   | (223) 773-8812 | (223) 775-8590                 |      |     |
| Leeken, Rufus    | (441) 907-5938 | (441) 911-2121                 |      |     |
| Rear, Scott      | 34-3-589-4879  | 34-3-447-5767                  |      |     |
| Chaudhori, Jaijy | (821) 366-5839 | (821) 365-3112                 |      |     |

## To find a text string

You can use the Fast Goto feature to begin searching at the *beginning* of the first column on your screen. You cannot use it, however, to search for text strings in the middle of the first field, or in other fields. For example, you can find **Schroeder** in the previous illustration, but not **Henry**. You can use the Find command to search for text strings anywhere in the Phone Book.

1. From the Search menu, choose Find ((**Ctrl**)+(F)).
2. Type the string of characters or text to search for.

If you want to search the Note field, or match upper and lower case letters, mark these boxes.

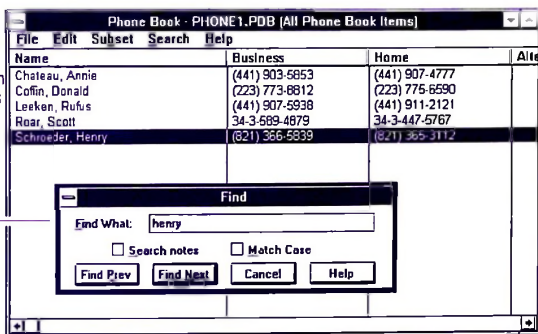
3. Choose Find Next to find the next occurrence of the text.

-or-

Choose Find Prev to find the previous occurrence of the text.

The Phone Book searches for the text beginning at the current cursor location and stops when it reaches the top or bottom of the list.

Searches all fields in the record to find "Henry."



To continue searching (*in the same direction*) for the text string you specified, press (**F3**).

---

## Creating and Using Subsets

You can save time searching for information by creating logical groups of Phone Book records called *subsets*. Creating a subset lets you specify a set of records to be *displayed*. This does not change any of your original Phone Book data—only what you see on the screen.

When creating a subset, you need to first decide which records you want in the subset. You do this by specifying *search criteria* that either *includes* or *excludes* records. For example, you could specify that you want to see all records in the Phone Book that contain the word **Business** in the Category field. Or, you could specify that you want to see all the records in the Phone Book *except* those with the word **Business** in the category field. You can specify matching criteria for as many fields as you like.

This section describes how to create and use subsets, including the following tasks:

- ▶ Creating subsets to show groups of related records.
- ▶ Viewing different subsets.
- ▶ Editing, renaming, and deleting subsets.

---

## To define the records for a subset

Before you can create a subset, you'll need to understand how to define which records you want to include—or exclude. When you define these records, you'll be working in a dialog box just like the one you used when you added or edited records. Except in this dialog box, you'll be typing the criteria you want to *match*. When you display a subset (page 2-18), the Phone Book searches for the matching records and displays them.

The Phone Book provides a number of ways for you to specify which records you want to find.

- If you want to search a field for a certain word or number, type that word or number in that field. For example, to find all the records with Montana in the State field, type Montana in the State box.
- If you want a subset to *exclude* records with a certain word or number, then precede that entry with a hyphen—for example, - Montana. The Phone Book will search for all records except those with Montana as the State.
- If you want to find all the records for a field, leave the field blank in your subset definition.

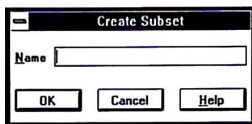
Note that a record is included (or excluded) in the subset if matching text appears *anywhere* in that field. For example, type marc in the Name box to include any of the following:

Bon Marche  
Johnson, Marc  
MARCEL's Used Books  
Welby, Marcus

---

## To create a subset of records

1. From the Subset menu, choose Create ((Alt) (B) (C)).
2. Type a name for the subset—up to 16 characters in length.



3. Choose OK to display the Create Subset dialog box.
4. Type your matching criteria in one or more fields.
5. Choose OK.

The Phone Book doesn't show the subset you created until you display it.  
See "To display a subset" on page 2-18.

The examples on the following pages show you how to create subsets of your Phone Book records.

### More about Subsets

You can define a maximum of 15 subsets depending on the size of your Phone Book file. If the file is quite large—reaching or nearly reaching full capacity of 2,500 records—you may not be able to create as many subsets. If the Create command on the Subset menu is not available, you'll have to delete one or more subsets before you can add another. When you extract or copy Phone Book records into a new file, the subsets are also copied.

### Example: Creating a subset using two fields

You're planning a business trip to New York to visit your clients at the Acme Engineering Company. You want to create a subset for these clients called *Acme Engineering*.

1. From the Subset menu, choose Create ((Alt) B (C)).
2. In the Name box, type the subset name: **Acme Engineering**, and choose OK.
3. In the Company box, type **Acme**.
4. In the State box, type **NY**.
5. Choose OK to create the subset and close the dialog box.

The Phone Book finds all records containing *both* Acme in the Company field and NY in the State field. You can type matching criteria in as many fields as you like. To view your newly created subset, see "To display subsets" on page 2-18.

This subset finds records for the Acme Engineering Company in the state of New York.

**Create Subset (Acme Engineering)**

Name

Phone: Business  Home

Alternate  Fax

Title  Category

Company

Address1

Address2

City  State  Zip

Note

OK Cancel Help

### Example: Creating a subset that excludes certain records

You want to make a subset listing your out-of-state clients. You live in Florida. Name the subset *Out-Of-State*.

1. From the Subset menu, choose Create ((Alt) (B) (C)).
2. In the Name box, type the subset name: **Out-Of-State**. and choose OK.
3. In the State box, type **-FL**.

The hyphen indicates that all records containing FL should be excluded from this subset.

4. Choose OK to create the subset, and close the dialog box. To view your newly created subset, see “To display subsets” on page 2-18.

Use the hyphen ( - )  
to exclude Phone  
Book records.

The screenshot shows a dialog box titled "Create Subset [Out-Of-State]". It contains several input fields: "Name", "Phone: Business", "Home", "Alternate", "Fax", "Title", "Company", "Address1", "Address2", "City", "State" (which is set to "-FL" and circled), "Zip", and "Note". At the bottom are three buttons: "OK", "Cancel", and "Help".

#### Hint

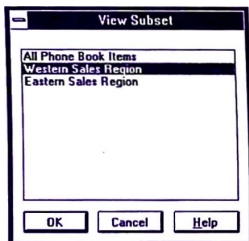
The Category field in a record is often used to create subsets. In the Category box, you can create special codes to identify records you want later to group into subsets. Keep this in mind when creating categories. For more about categories, see page 2-5.

## To display a subset

2

1. From the Subset menu, choose View ((A)l(t) (B) (V)).
2. Select the subset you want to view.
3. Choose OK.

The Phone Book displays the records that match the subset description.



---

## To delete a subset

When you delete a subset, you are not deleting any of your actual Phone Book records. You're deleting only the subset name and matching criteria.

1. From the Subset menu, choose Edit ((A)l(t) (B) (E)).
2. Select the subset you want to delete.

You cannot delete the set of *All Phone Book Items*.

3. Choose Delete, then OK to confirm deleting the subset.

Note that if you delete a subset in error, you cannot *undo* this action from the Edit menu. You'll have to create it again.



---

## To edit a subset

You can edit any subset except *All Phone Book Items*.

1. From the Subset menu, choose Edit ((Alt) (B) (E)).
2. Select the subset you want to edit.
3. Choose OK.
4. Make your changes to the subset definition.
5. Choose OK.

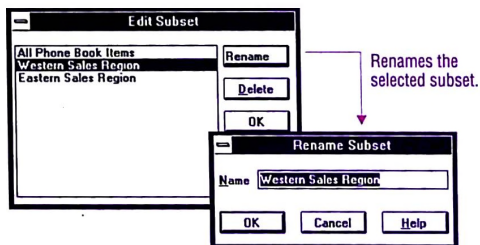
---

## To rename a subset

1. From the Subset menu, choose Edit ((Alt) (B) (E)).
2. Select the subset you want to rename.

You cannot rename the set of *All Phone Book Items*.

3. Choose Rename to open the Rename Subset dialog box.
4. Type the new name.
5. Choose OK.



---

## Customizing the Display

You can customize the appearance of the Phone Book list by changing the column width, the column order, the number of columns displayed, and the sort order in which records are displayed. These changes affect the *appearance* of the list only. It does not affect the actual data recorded.

This section provides step-by-step procedures for customizing the Phone Book display, including the following:

- ▶ Changing the widths of columns.
- ▶ Rearranging columns.
- ▶ Hiding columns you don't need or use.
- ▶ Sorting your records in a different order.

---

### To hide columns

You can *hide* any columns you don't need or use.

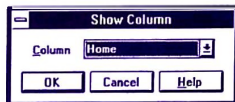
1. From the Subset menu, choose Arrange Columns ((Alt) (B) (A)).
2. In the Column box, select the name of the column you want to hide.
3. Choose Hide, then choose OK.

The hidden column is not displayed on your Phone Book screen. Note that you cannot print hidden columns.

---

### To show hidden columns

1. From the Subset menu, choose Arrange Columns ((Alt) (B) (A)).
2. Choose Show to display the Show Column dialog box.



3. Select the column you want to show, then choose OK.
4. Choose OK again to close the Arrange Columns dialog box.

The Phone Books displays the column again as the *last* column in the record—position 14.

## To sort a list of phone records

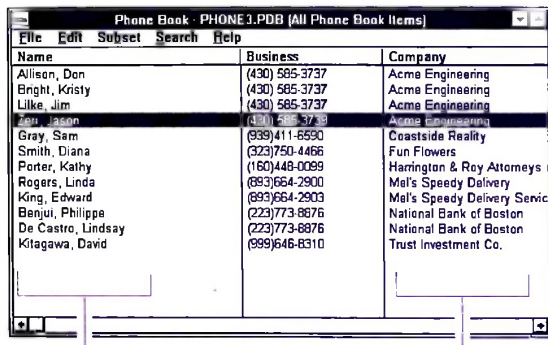
By default, the Phone Book sorts the phone list by the Name column and in alphabetical order. You can change the sort criteria with the following procedure.

1. From the Subset menu, choose Sort ((Alt) (B) (S)).
2. Select your 1st—highest priority sorting column.
3. Select the sorting order for the 1st column—Ascending or Descending.

You can repeat steps 2 and 3 to sort by two more columns.

4. When you're finished filling in the Sort dialog box, choose OK.

The following illustration shows the Phone Book sorted by two columns—first by *Company* and then by *Name*. Both columns are sorted in ascending order.



The screenshot shows a window titled "Phone Book - PHONE3.PDB (All Phone Book Items)". The menu bar includes File, Edit, Subset, Search, and Help. The main display area is a table with three columns: Name, Business, and Company. The records are sorted by Company (ascending) and then by Name (ascending). The records are as follows:

| Name               | Business       | Company                       |
|--------------------|----------------|-------------------------------|
| Allison, Don       | (430) 585-3737 | Acme Engineering              |
| Bright, Kristy     | (430) 585-3737 | Acme Engineering              |
| Liike, Jim         | (430) 585-3737 | Acme Engineering              |
| Gray, Sam          | (430) 585-3737 | Acme Engineering              |
| Gray, Sam          | (939) 411-6590 | Coastside Realty              |
| Smith, Diana       | (323) 750-4466 | Fun Flowers                   |
| Porter, Kathy      | (160) 448-0099 | Harrington & Roy Attorneys    |
| Rogers, Linda      | (893) 664-2900 | Mal's Speedy Delivery         |
| King, Edward       | (893) 664-2903 | Mal's Speedy Delivery Service |
| Benjui, Philippe   | (223) 773-8876 | National Bank of Boston       |
| De Castro, Lindsay | (223) 773-8876 | National Bank of Boston       |
| Kitagawa, David    | (999) 646-8310 | Trust Investment Co.          |

Sorted 2nd by Name.

Sorted 1st by Company.

## To change the width of a column

You can change the width of columns in the Phone Book with the mouse or with the Arrange Columns command on the Subset menu.

### To change column width with the mouse

1. Move the pointer over the *right edge* of the column header you want to resize.

The pointer becomes a .

2. Drag the pointer to increase or decrease the column width.
3. When the column is the size you want, release the mouse.

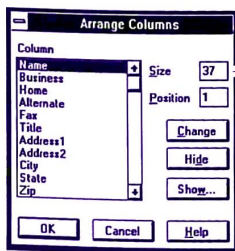
If you need a more exact measurement, use the following method.

### To change column width with the Arrange Columns command

1. From the Subset menu, choose Arrange Columns (**Alt B A**).
2. In the Column box, select the name of the column you want to change.
3. In the Size box, type a width—any number of characters from 1 to 125.

If you want to change the width of several columns, choose Change after each column you change, then choose OK to adjust the column width.

4. Choose OK to adjust the column width and close the dialog box.



The size you choose can be any number of characters from 1-125.

---

## To move a column

You can move a column in the Phone Book with the mouse or with the Arrange Columns command on the Subset menu.

2

### To move columns with the mouse

This method works best if you're moving a column to a position on the same screen. If you need to move across several screens, use the Arrange Columns command on the Subset menu.

1. Move the pointer over the column *head* you want to move.

The pointer becomes a .

2. Drag the pointer over the column gridline where you want to move.
3. When the pointer changes to , release the mouse button.

### To move columns with the Arrange Columns command

1. From the Subset menu, choose Arrange Columns (  .
2. In the Column box, select the name of the column you want to move.
3. In the Position box, type the column position—any number between 1 and 14. If you want to move several columns, choose Change after each column position you change, then choose OK to reorganize the columns.
4. Choose OK to move the column and close the dialog box.

---

## Managing Your Phone Book Files

This section provides step-by-step procedures for managing your Phone Book files, including the following:

- ▶ Creating a new Phone Book file.
- ▶ Opening phone book files, including files from the HP 95LX and HP 100LX.
- ▶ Merging two phone book files.
- ▶ Extracting records and saving them in a new file.

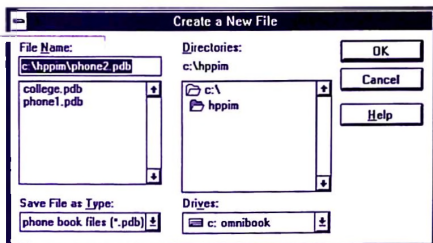
---

### To create a new Phone Book file

1. From the File menu, choose New ((Alt) (F) (N)).
2. Type a name for the new file (or use the default name provided).
3. Choose OK to create the new file.

You don't need to save the current file—the Phone Book saves your files automatically as you create and edit records.

The Phone Book creates a default file name for you.



---

### To open a Phone Book file

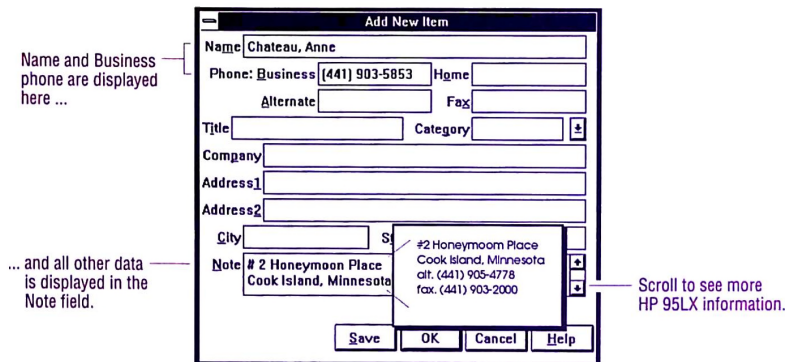
1. From the File menu, choose Open ((Alt) (F) (O)).
2. Select the file you want to open, then choose OK.

You don't need to save the current file—the Phone Book saves your files automatically as you create and edit records.

## To open an HP 95LX Phone Book file

1. Copy the HP 95LX Phone Book file to your OmniBook. You can use one of these methods:
  - On the HP 100LX, copy the file to a plug-in card, then insert the card in your OmniBook.
  - Use an HP 100LX Connectivity Pack to copy the file to your PC, then use a LapLink Remote connection to move the file from the PC to your OmniBook. If you need help doing this, see chapter 2 in the *OmniBook Operating Guide*.
2. From the File menu, choose Open ((Alt) F O).
3. Under List Files Of Type, select 95LX Phone Book.
4. Select the HP 95LX file you want to open, and choose OK.

The Phone Book converts the HP 95LX file to an OmniBook Phone Book file, giving it the name you specify (with the default extension .PDB). This requires some processing time. The two types of phone records do not have exactly the same fields so this is how the information will be displayed.



---

## To open an HP 100LX file

1. Copy the HP 100LX Appointment Book file to your OmniBook. You can use one of these methods:
  - On the HP 100LX, copy the file to a plug-in card, then insert the card in your OmniBook.
  - Use an HP 100LX Connectivity Pack to copy the file to your PC, then use a LapLink Remote connection to move the file from the PC to your OmniBook. If you need help doing this, see chapter 2 in the *OmniBook Operating Guide*.
2. From the File menu, choose Open ((Alt) (F) (O)).
3. Select the HP 100LX file you want to open, and choose OK.

The OmniBook Phone Book and the HP 100LX Phone Book have identical fields, so there will be no difference in how information is displayed.

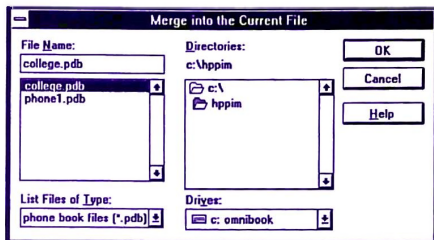
---

## To merge two Phone Book files

You can use this procedure to combine the records of two Phone Book files.

1. Open the Phone Book file to which you want to add another file.
2. From the File menu, choose Merge ((Alt) (F) (M)).

If you have any duplicate records, they will appear twice in the current file. Phone Book does not detect or combine repeated entries.





## To extract records and save them in a new file

Use this task to make a copy of selected records and save them in another file. This task does not delete any records from the current file.

1. Select the records you want to extract.
2. From the File menu, choose Extract ((Alt) (F) (E)).
3. Type the name of the file where the selected files will be copied.

If this file exists, the Phone Book prompts you to overwrite it with the selected records. Answering OK *deletes* information previously in that file. The Extract command also copies your current category list and any subsets you've created.

4. Choose OK to extract the records and close the dialog box.

### Hint

If you want to select a group of related records—for example, all the records for people working at the same company—you can first sort the records and then select a group of records. The following illustration shows Phone Book records sorted by Company with all of the records for the Acme Engineering Company selected.

Select the first record in the group, and then hold down Shift and select the last record in the group.

| Phone Book - PHONE3.PDB [All Phone Book Items] |                |                               |
|------------------------------------------------|----------------|-------------------------------|
| File                                           | Edit           | Subset Search Help            |
| Name                                           | Business       | Company                       |
| Allison, Don                                   | (430) 585-3737 | Acme Engineering              |
| Bright, Kristy                                 | (430) 585-3737 | Acme Engineering              |
| Liike, Jim                                     | (430) 585-3737 | Acme Engineering              |
| Zell, Jason                                    | (430) 585-3737 | Acme Engineering              |
| Gray, Sam                                      | (939) 411-6550 | Coastside Realty              |
| Smith, Diana                                   | (323) 750-4466 | Fun Flowers                   |
| Potter, Kathy                                  | (160) 449-0039 | Harrington & Roy Attorneys    |
| Rojers, Linda                                  | (893) 664-3900 | Mel's Speedy Delivery         |
| Ernst, Edward                                  | (893) 664-3900 | Mel's Speedy Delivery Service |
| Benji, Philippe                                | (223) 773-8876 | National Bank of Boston       |
| De Castro, Lindsay                             | (223) 773-8876 | National Bank of Boston       |
| Kitagawa, David                                | (999) 646-8310 | Trust Investment Co.          |

## Phone Book Commands

This section describes the commands on the Phone Book menus.

| File menu command | Description                                                                                                                                                                                                                                                                               |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| New               | Creates a new file with the default extension .PDB. The Phone Book saves the current file automatically as you enter and edit records.                                                                                                                                                    |
| Open              | Displays the standard dialog box to open existing files that may be located in different directories or on different storage devices. The Phone Book saves the current file automatically as you enter and edit records..                                                                 |
| Copy              | Displays a dialog box that lets you make a copy of the current file under a new name, in the same or in a different directory.                                                                                                                                                            |
| Merge             | Merges the contents of a selected file with the currently opened file, and sorts the merged records according to the current default sort-order. If you have any duplicate records, they will appear twice in the current file. The Phone Book does not detect or merge repeated entries. |
| Extract           | Extracts selected records and copies them to a file specified by the user, in the same or in a different directory. Extract does not alter the current file in any way.                                                                                                                   |
| Password          | Displays a dialog box prompting you for a password to protect the current file. The associated file can then be opened only by specifying the password.                                                                                                                                   |
| Print             | Prints the current file on the currently selected printer. First displays a dialog box where you can specify which columns and records to print, and a title for the printout.                                                                                                            |
| Printer Setup     | Displays the standard dialog box that allows you to switch from one printer connection to another, and to specify settings for the selected printer.                                                                                                                                      |
| Exit              | Exits the Phone Book application. Any changes to the current file are saved automatically.                                                                                                                                                                                                |

| Edit menu command | Description                                                                                                                    |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Current Item      | Displays the Edit dialog box where you can edit or view the current record. This is the same as double-clicking on the record. |
| Add New Item      | Opens the Add dialog box where you can add a new record to the Phone Book.                                                     |
| Delete            | Deletes the selected items. Use Undo to quickly restore any items deleted in error.                                            |
| Undo              | Reverses (in most cases) the last editing command—for example, delete, add, cut, copy, or paste.                               |
| Cut               | Removes the selected record and places it on the Clipboard.                                                                    |
| Copy              | Copies the selected record and places it on the Clipboard.                                                                     |
| Paste             | Copies the contents of the Clipboard to the Phone Book screen where it is sorted according to the current sort order.          |
| Select All        | Selects all records in the list.                                                                                               |

| Subset menu command | Description                                                                                                                                 |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| View                | Displays the current list of subsets where you can select a subset to view.                                                                 |
| Edit                | Displays a dialog box where you can select a subset to edit, rename, or delete.                                                             |
| Create              | Displays dialog boxes where you can name, and then define, a new subset.                                                                    |
| Sort                | Displays a dialog box where you can specify up to three columns to sort by.                                                                 |
| Arrange Columns     | Displays a dialog box where you can specify how many columns appear in a list, how wide they are, and the order in which they're displayed. |

| Search menu command | Description                                                                                                                                              |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Find                | Searches the Phone Book for a specified string of text. You must specify whether to search forward or backward. Find does not search the current record. |
| Repeat Last Find    | Searches the phone records for the last specified string of text.                                                                                        |

| Help menu command | Description                                                                                                                                                                                                                                            |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contents          | Opens a Help window and displays a list of main topics. For help on a topic, select a topic, and then press <b>(Enter)</b> . When you press <b>(F1)</b> for help, you'll get context-sensitive help about the current command, dialog box, or message. |
| Keyboard          | Opens a Help window and displays information about the Phone Book keyboard shortcut keys.                                                                                                                                                              |
| Using Help        | Opens a Help window and displays instructions for using Help.                                                                                                                                                                                          |
| About             | Displays a window displaying the Phone Book version number and copyright information.                                                                                                                                                                  |

# Phone Book Keyboard Shortcuts

Once you're familiar with the Phone Book menus, you'll find that there are keyboard shortcuts that let you move around and perform tasks more quickly.

This section describes the following:

- ▶ Keyboard shortcuts.
- ▶ Navigation keys.

2

## To use the Phone Book keyboard shortcuts

### To do this

### Press these keys

Get help for the selected command, open dialog box, or message. **(F1)**

Add a new record to the Phone Book.

**(F2)**

Find a text string.

**(Ctrl)+(F)**

Repeat the last Find command.

**(F3)**

Print phone records.

**(Ctrl)+(P)**

Undo the last editing command.

**(Ctrl)+(Z)**

Cut a record from the Phone Book.

**(Ctrl)+(X)**

Copy a record from the Phone Book.

**(Ctrl)+(C)**

Paste a record into the Phone Book or another application.

**(Ctrl)+(V)**

Select all Phone Book records.

**(Ctrl)+(spacebar)**

Exit the Phone Book.

**(Alt)+(F4)**

---

## To use the Phone Book navigation keys

### To move

Up one record in the list.

Down one record in the list.

To the top of the list.

To the bottom of the list.

To the first column in a record.

To the last column in a record.

One column to the right.

One column to the left.

Up one page at a time.

Down one page at a time.

Right one page at a time.

Left one page at a time.

### Press these keys

▲

▼

Home

End

Ctrl+◀

Ctrl+▶

▶

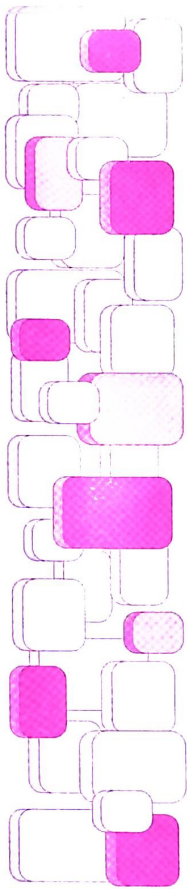
◀

PgUp

PgDn

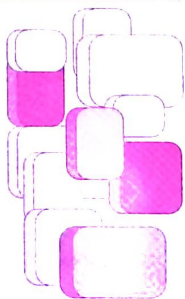
Ctrl+PgDn

Ctrl+PgUp



---

## Part 3: HP Financial Calculator



---

# HP Financial Calculator

The HP Financial Calculator provides a complete set of Calculator applications that help you answer problems dealing with:

- ▶ General arithmetic (chapter 3).
- ▶ Technical math (chapter 4).
- ▶ Business percentages, including markup and margin (chapter 5).
- ▶ Time value of money (chapter 5).
- ▶ Interest rate conversions (chapter 5).
- ▶ Currency and other unit conversions (chapter 6).
- ▶ Solving equations that you enter (chapter 7).
- ▶ Practical examples (chapter 8).
- ▶ A complete reference of Calculator functions (chapter 9).

Like the other OmniBook applications, the HP Financial Calculator uses windows, menus, and Toolbar buttons similar to those found in Microsoft Windows applications.

You should understand Windows fundamentals before you begin working with the HP Financial Calculator. If you need a review, you can refer to chapter 5 in the *Operating Guide*, "Using Windows," or chapter 2 in the *Quick Start Guide*, "Using Microsoft Windows on Your Omnibook."

---



---

## Calculator Basics

---

# Calculator Basics

## In This Chapter

This section presents the basic skills and concepts that you need to work efficiently with the HP Financial Calculator. In this section you'll learn how to

- ▶ Start the Calculator and move between applications.
- ▶ Use the Arithmetic application.
- ▶ Enter numbers and complete simple calculations.
- ▶ Use the Calc line to solve arithmetic problems.
- ▶ Save and recall numbers with the Calculator stack and registers.
- ▶ Customize the Calculator.

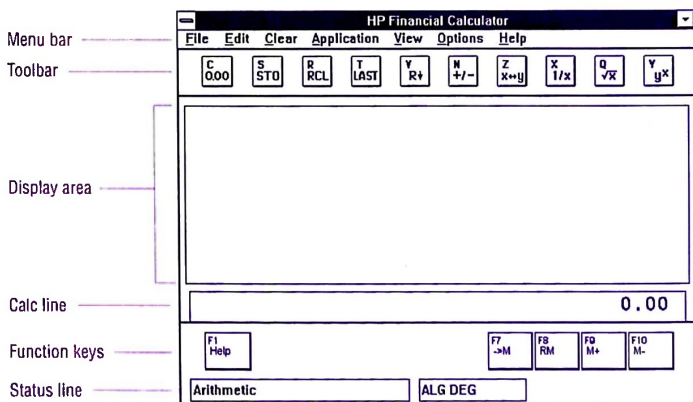
## Getting Started

This section describes the preliminary tasks you'll need to understand during your first few sessions with the Calculator, including step-by-step instructions for the following tasks:

- ▶ Starting the Calculator and using the Arithmetic application.
- ▶ Entering and editing numbers.
- ▶ Performing simple calculations.
- ▶ Clearing information from the Calc line.

### To start the Calculator

- Press **(Fn)+(F5)**.  
-or-  
From Program Manager, double-click the HP Financial Calculator icon.  
The following picture shows the parts of the Calculator screen.

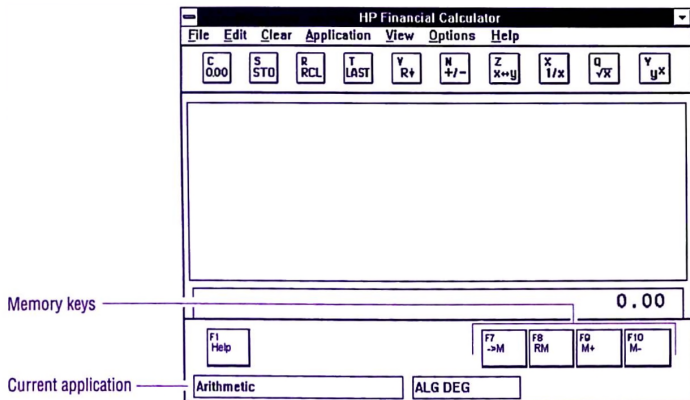


## To use the Arithmetic application

The first time you start the Calculator, you'll see the Arithmetic application. After that, the Calculator will start again in the application from which you exited. The Arithmetic application is designed for performing simple calculations such as (+), (−), (\*), and (/). While you can solve arithmetic problems from any Calculator application, if you use the Calculator for simple arithmetic only, you'll probably find this screen the easiest to use.

- From the Applications menu, choose Arithmetic ((Alt) [A] [A]).

The Calculator displays the Arithmetic application and the memory function keys.



## To enter and edit numbers

The Calc line is where you enter numbers and display results.

- Using the keyboard, start typing a number.

The number is displayed in the Calc line as you type it.

- Press **(Enter)** to enter the number.

You can use the following options to correct mistakes while typing or entering numbers.

### To do this

Delete the last operator or last digit you *typed*.

Delete the last number you *entered*.

Clear the Calc line.

Change the sign of the displayed number.

### Press this key

**← Backspace**

**← Backspace**

**[Del]** or **[C]**

**[N] (+/-)**

## To use the Arithmetic memory keys

The Arithmetic memory keys (**(F7)** through **(F10)**), are displayed in the Arithmetic application. If you have ever used a simple pocket-book calculator, these memory keys will be familiar.

### This key

**(F7) (→M)**

**(F8) (RM)**

**(F9) (M+)**

**(F10) (M-)**

### Does this

Stores the value in the Calc line in memory.

Recalls the value in memory to the Calc line.

Adds the value in the Calc line to the value in memory.

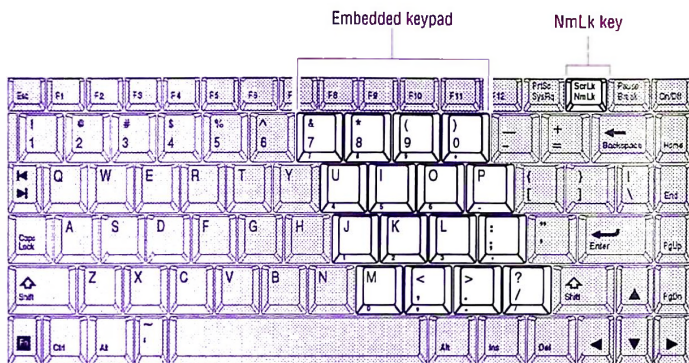
Subtracts the value in the Calc line from the value in memory.

## To use the embedded keypad

Another method for entering numbers in the Calc line is to use the OmniBook's embedded numeric keypad.

- To activate the keypad, press **NmLk** on the top row of your keyboard.

You can now use the embedded keypad just as you would use the keypad on your PC. When finished, press **NmLk** again to deactivate the keypad.

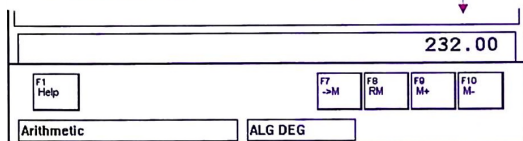


## To perform a simple calculation

For simple calculations, such as addition, subtraction, multiplication, or division, just use your keyboard. This example—as well as all others in this manual—assumes algebraic (ALG) mode.

1. Type the first number in your calculation.
2. Type the appropriate operator (**(+)**, **(-)**, **(\*)**, or **(/)**).
3. Type the next number in your calculation.
4. Press **(Enter)** to complete the calculation and display the result.
5. Continue typing numbers and operators followed by **(Enter)** to complete each calculation.

Your calculation appears in the Calc line as you type it.

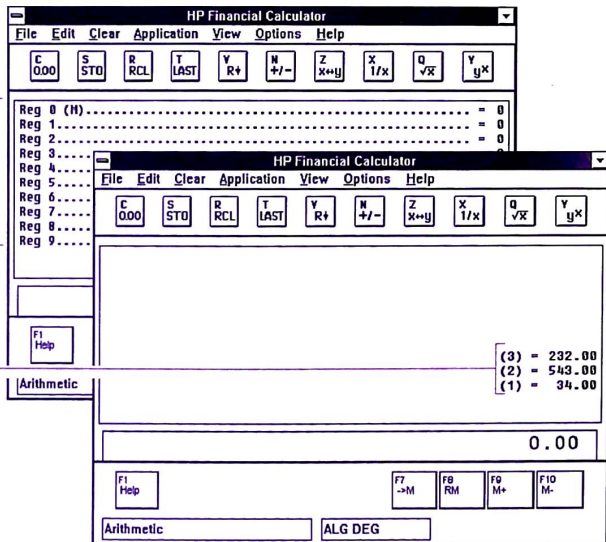


## Saving and Recalling Numbers

Sometimes, you may want to include the result of a previous calculation in a new calculation. The Calculator provides two basic ways for you to save and recall numbers: the calculator *stack* and the calculator *registers*. Notice in the illustration below that Register 0 is labeled (M). When you use the Arithmetic memory (M) keys, you're actually using the first register.

In this section you'll learn how to

- ▶ Display the stack or registers.
- ▶ Recall numbers in the calculator.
- ▶ Move and switch numbers in the calculator *stack*.
- ▶ Save and recall numbers from the *registers*.
- ▶ Save and recall numbers using the Clipboard.





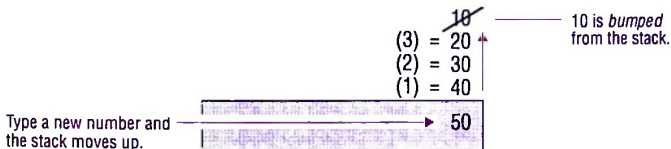
## To display the stack

You can display the stack in the Arithmetic and Math applications only. The Calculator stack is a four-level record of your activities within the Calculator. It includes the Calc line and three levels above the Calc line.

- From the View menu, choose Stack (**Alt** **V** **S**).

### How the Stack Works

When you start a new operation on the Calc line, the previous contents move up to level 1, bumping level 1 contents to level 2, level 2 to level 3, and level 3 off the stack. You lose any numbers that are *bumped* off the stack.



## To move numbers in the stack

There are three Calculator buttons on the Toolbar that let you manipulate numbers in the stack. These are the Roll button, the Last button, and the Exchange button.



Roll button

### To cycle through numbers in the stack

- Click the Roll button (or press **V**).

The Calculator moves the values in the stack down one level—moving level 3 to 2, 2 to 1, and 1 to the Calc line.



Last button

### To recall the number in level 1 to the Calc line

- Click the Last button (or press **(T)**).

Note that in RPN mode, the Last button recalls the number you typed just prior to the last completed calculation.



Exchange button

### To exchange numbers in the stack or in the Calc line

- Click the Exchange button (or press **(Z)**).

If you have a number in the Calc line, the Calculator exchanges that number with the number in level 1. If you have an incomplete calculation in the Calc line, the Calculator exchanges the two operands. For example, 2.00/3.00 becomes 3.00/2.00.

---

## To store a number in the register

The Calculator has 10 *registers* (storage locations), numbered 0 through 9, that you can use to store and recall numbers.



Store button

- From the View menu, choose Registers (**(Alt)** **(V)** **(R)**).

The Calculator displays the registers on your screen and the stack disappears. You cannot display the stack and the registers at the same time.

- Type the number you want to store.
- Click the Store button (or press **(S)**).
- Type the number of the register where you want to store the number—for example, type 5 to store the number in register 5.

If there is more than one number in the Calc line, the Store command copies the last number you typed.



Recall button

---

## To recall a number from the register

1. Click the Recall button (or press **(R)**).
2. Type the register number containing the value you want to recall.

The Calculator copies that number to the Calc line leaving the stored value in the register.

---

### Hint

To quickly recall a number from a register or from the stack, just click on the number in the display area. You can use this method to recall values from any Calculator application.

---

---

## To do arithmetic with registers

You can add, subtract, multiply, or divide the number in a storage register by the number in the Calc line and store the result in the same register.

1. Type or calculate a number in the Calc line.
  2. Click the Store button (or press **(S)**).
  3. Press **(+)**, **(-)**, **(\*)** or **(/)** to specify how to combine the number into the register.
  4. Type the number of the register where you want to do the arithmetic.
- 

---

## To clear registers or the stack

- From the Clear menu, choose Registers (**(Alt) (C) (R)**).  
-or-  
From the Clear menu, choose Stack (**(Alt) (C) (S)**).

In most cases, it is unnecessary to clear stacks or registers, since storing one number replaces the previous one. You can also clear a register by storing a 0 in it.

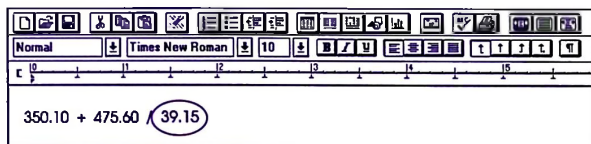
## To copy data to the Clipboard

The Clipboard lets you capture the contents of the Calc line and move it to another OmniBook application. For example, you could use the Clipboard to capture the result of a percentage calculation and insert it in a Microsoft Excel worksheet or Word document.

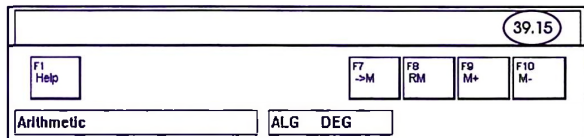
- From the Edit menu, choose Copy.

If you open another application, you can insert the Clipboard contents—just as you usually do. Another option is to copy the Clipboard contents to another application *within* the Calculator, for example, from the Math application to the Time Value of Money application. Inserting from the Clipboard works a little differently within the Calculator. When you paste the contents of the Clipboard into the Calc line, only the *last number* in the Clipboard is pasted—regardless of what you copied. The Calculator ignores all non-numeric characters, for example, + or –.

Clipboard contents pasted in a Word document.



Same Clipboard contents pasted to the Calc line.



## To insert Clipboard contents

- From the Edit menu, choose Paste.

The Clipboard contents are inserted at the insertion point in another OmniBook application, or in the Calc line in the Calculator application.

---

## To figure percent

In most cases, **(%)** divides the last number in the Calc line by 100. The exception is when a plus or minus sign precedes the number. Then, **(%)** uses the last number as a percent, and calculates that percent of the number preceding the plus or minus sign.

### Example: Calculating 27 percent of 85.3

1. Type  $85.3 * 27 \%$ .
2. Press **(Enter)**.

The Calculator divides 27 by 100, calculates 27% of 85.3, and displays 23.03 in the Calc line.

### Example: Calculating simple interest

You've borrowed \$1,250 from a relative, and have agreed to repay the loan in a year with 7% simple interest. How much money will you owe?

1. Type  $1250 + 7 \%$ .
2. Press **(Enter)**.

The Calculator calculates the interest on the loan (7% of \$1250) which is \$85.70, and displays 1,337.50—the total amount you must repay at the end of 1 year.

---

## To round a number

The following example shows how the Calculator rounds numbers. In this example, you'll use the Math application—covered in detail in chapter 4. This example assumes the Number Format is set to the Calculator default—Fixed Point (2 decimal places). For information about setting the Number Format, see page 3-19.

### Example: Rounding a number

1. From the Applications menu, choose Math (**Alt** **A** **M**).

2. Type  $4.589 + 2.6891$  and press **Enter**.

The Calculator calculates 7.2781. Although the result is displayed to two decimal places—7.28—the more precise number is in memory and is used in any further calculations.

3. Press **F2** (RND) to round the number.

The Calculator rounds the number to 7.28. 7.2781 is no longer in Calculator memory.

3

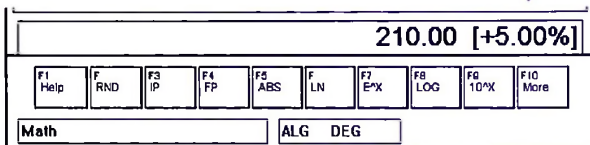
### To set the automatic constant

An *automatic constant* is an operator—for example, **(+)**, **(-)**, **(\*)**, **(/)**, or **(<sup>-</sup>)**, and a number or percentage that can be used for repetitive calculations. (This task only works in algebraic mode).

1. Type an operator twice—for example, **(+)** **(+)**.
2. Type a number, or a number followed by the percent sign—for example, 5%.
3. Press **Enter** to set the constant.

Once initiated, the constant is displayed to the right of the Calc line in brackets, for example **[+5%]**. Now, each time you type a new number followed by **Enter**, the constant completes the calculation. If the constant is so long as to obscure a portion of your calculation or result, the Calculator abbreviates it temporarily to K—for example, **[+K%]**.

This automatic constant adds 5% to the number you enter in the Calc Line.



---

## To clear the automatic constant

- To clear the constant and the result, press **[Del]**.

-or-

To clear the constant and leave the result, press **⬅ Backspace**.



---

## Customizing the Calculator

After you use the Calculator for a while, you might want to adjust some of the settings to accommodate the way you work. The Options menu provides a number of ways for you to customize the Calculator environment. This section provides step-by-step procedures for customizing the Calculator including the following:

- ▶ Setting the number format.
- ▶ Setting the angle mode.
- ▶ Setting the math mode—algebraic or RPN.
- ▶ Learning more about RPN.

---

3

### To set the number format

When setting the number format, you can specify a kind of notation as well as the number of decimal places. The Calculator provides four options:

|             |                                                                                                                        |
|-------------|------------------------------------------------------------------------------------------------------------------------|
| Fixed Point | Displays numbers rounded to the specified number of decimal places.                                                    |
| Scientific  | Displays a number as a mantissa (with one digit to the left of the decimal point) and an exponent.                     |
| Engineering | Displays a number as a mantissa followed by an exponent that is a multiple of 3.                                       |
| All         | Displays all of the digits necessary (up to 16) to display the full precision of the number you entered or calculated. |

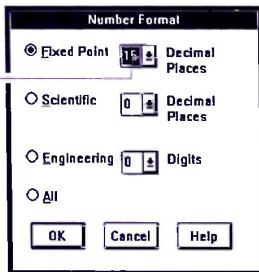
By default, the Calculator displays exactly 2 digits past the decimal point for every number. Your HP Financial Calculator, however, provides for *16-digit precision* meaning that every number in the the Calculator actually contains 16 digits. The Calculator will always use numbers with 16 digits in your calculations regardless of how many you choose to display.

You can change the number format with the following procedure.

1. From the Options menu, choose Number Format ((Alt) (O) (F)).
2. Select Fixed Point, Scientific, or Engineering.  
-OR-  
Choose All to display the full precision of the number.
3. Select the number of decimal places or digits you want, then choose OK.

3

You can select a maximum of 15 decimal places.



---

## To set the angle mode

By default the angle mode is set to Degrees. The Calculator gives you three choices for the units used for angles: degrees, radians, or gradians. You can change the angle mode with the following procedure.

- From the Options menu, choose the mode you want.

The status line at the bottom of your screen shows you the current mode: RAD for Radians mode, GRAD for Gradians mode, and DEG for Degrees mode.

## To set RPN or algebraic mode in the Calculator

Reverse Polish Notation (RPN) is based on an unambiguous, parentheses-free mathematical logic known as "Polish Notation," developed by the Polish mathematician Jan Lukasiewicz (1878-1956). While conventional algebraic notation places the operators *between* the relevant numbers or variables, Lukasiewicz's notation places them *before* the numbers or variables. For optimal efficiency, we have modified that notation to specify the operators *after* the numbers. Hence the term *Reverse Polish Notation* or RPN.

| To calculate this | In Algebraic Mode                                      | In RPN Mode                                           |
|-------------------|--------------------------------------------------------|-------------------------------------------------------|
| 12 + 3            | 12 $\boxed{+}$ 3 $\boxed{\text{Enter}}$                | 12 $\boxed{\text{Enter}}$ 3 $\boxed{+}$               |
| 27% of 200        | 200 $\boxed{*}$ 27 $\boxed{\%}$ $\boxed{\text{Enter}}$ | 200 $\boxed{\text{Enter}}$ 27 $\boxed{\%}$            |
| 200 less 27%      | 200 $\boxed{-}$ 27 $\boxed{\%}$ $\boxed{\text{Enter}}$ | 20 $\boxed{\text{Enter}}$ 27 $\boxed{\%}$ $\boxed{-}$ |

- From the Options menu, choose RPN for Reverse Polish Notation.  
-or-  
Choose Algebraic for algebraic mode.

Notice that the status line displays RPN or ALG to remind you whether algebraic or RPN mode is active.

## To learn more about RPN

There are several easy-to-follow books designed to explain RPN to the beginner. Here is one such book:

*ENTER* by Jean-Daniel Dodin.

It's available at the time of this writing from:

EduCALC  
27953 Cabot Road  
Laguna Niguel, CA 92677 USA  
Telephone: 1 (800) 677-7001 (Credit card orders only)



---

## Technical Math Functions

---

# Technical Math Functions

## **In This Chapter**

Chapter 3 introduced you to the Arithmetic application and using the Calc line for simple arithmetic problems. If you need the Calculator for more technical math functions—for example, trigonometric or conversion functions, the Math application is where you need to work. Chapter 4 introduces the Math application.

# Solving Technical Math Problems

This section provides step-by-step procedures for solving technical Math problems, including the following tasks:

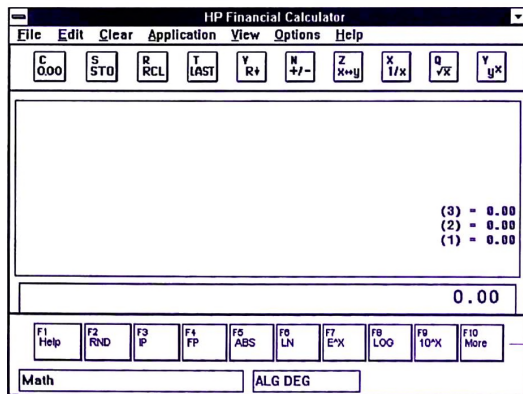
- ▶ Starting the Math application.
- ▶ Calculating integer part, fractional part, or absolute value.
- ▶ Using the exponential and logarithmic functions.
- ▶ Using the trigonometric functions.
- ▶ Using the angle- and hour-conversion functions.
- ▶ Using the polar/rectangular coordinate functions.
- ▶ Using the probability functions.

4

## To start the Math application

- From the Applications menu, choose Math ((Alt) [A] [M]).

There are more Math functions than can be seen on a single screen. To see more Math functions, press (F10) (More). There are four screens of additional Math functions available.



---

## To calculate integer part, fractional part, or absolute value of a number.

Use the following procedure to calculate any of these values for the last real number displayed in the Calc line.

1. From the Applications menu, choose Math ((**Alt**) (**A**) (**M**)).
2. Type or calculate a number in the Calc line.
3. Choose any of the following options:

Use this key

To calculate this

(**F3**) (IP)

Integer part of a number.

(**F4**) (FP)

Fractional part of a number.

(**F5**) (ABS)

Absolute value of a number. The absolute value of a number is the number without its sign.

---

## To use the exponential and logarithmic functions

There are four exponential and logarithmic functions.

1. From the Applications menu, choose Math ((**Alt**) (**A**) (**M**)).
2. Type or calculate a number in the Calc line.
3. Choose any of the following options:

Use this key

To calculate this

(**F6**) (LN)

Natural (base  $e$ ) logarithm of a positive number.

(**F7**) (E<sup>X</sup>)

Natural antilogarithm:  $e^x$ .

(**F8**) (LOG)

Common (base 10) logarithm of a positive number.

(**F9**) (10<sup>X</sup>)

Common (base 10) antilogarithm:  $10^x$ .



### Example: Finding the natural log of 47.5

1. From the Applications menu, choose Math ((Alt) A (M)).
2. Type 47.5 (F6) (LN).

The Calculator displays the natural log of 47.5: 3.86. You can press (F7) (E^X) to display the natural antilogarithm of the previous result.

## To use the trigonometric functions

4

Trigonometric functions interpret angles in degrees, radians, or gradians, depending on the angle mode. For instructions about changing the angle mode, see page 3-20.

1. From the Applications menu, choose Math ((Alt) A (M)).
2. Press (F10) (More) to display the trigonometric function keys.
3. Type or calculate a number in the Calc line (not necessary for  $\pi$ ).
4. Choose any of the following options:

#### Use this key

#### To calculate this

(F2) (PI)

An approximation of the mathematical constant  $\pi$ .  
Returns the number 3.141592653589793—accurate to 15 decimal places.

(F3) (SIN)

The sine of the angle in the Calc line.

(F4) (COS)

The cosine of the angle in the Calc line.

(F5) (TAN)

The tangent of the number in the Calc line.

(F6) (ASIN)

The arc sine of the number in the Calc line

(F7) (ACOS)

The arc cosine of the number in the Calc line.

(F8) (ATAN)

The arc tangent of the number in the Calc line.

---

## To use the angle- and hour-conversion functions

There are four angle- and hour-conversion functions.

1. From the Applications menu, choose Math ((**Alt**) (**A**) (**M**)).
2. Press (**F10**) (More) twice to display the angle and hour functions.
3. Type or calculate a number in the Calc line.
4. Choose any of the following options:

| <u>Use this key</u> | <u>To do this</u>                          |
|---------------------|--------------------------------------------|
| ( <b>F2</b> ) (DEG) | Convert radians to decimal degrees.        |
| ( <b>F3</b> ) (RAD) | Convert degrees to radians.                |
| ( <b>F4</b> ) (HR)  | Convert HMS to decimal hours (or degrees). |
| ( <b>F5</b> ) (HMS) | Convert decimal hours to HMS.              |

---

## To use the polar/rectangular coordinate functions

These functions interpret the angle as degrees, radians, or gradians depending on the current trigonometric mode.

1. From the Applications menu, choose Math ((**Alt**) (**A**) (**M**)).
2. Press (**F10**) (More) twice to display the coordinate conversion functions.
3. For each of the two known coordinates (XCOORD and YCOORD, or RADIUS and ANGLE), type or calculate the value and press its key. Do this for both coordinates.
4. For the coordinate you want to calculate, just press its key.
5. Choose any of the following options:

| <u>Use this key</u>    | <u>To do this</u>                                                                                |
|------------------------|--------------------------------------------------------------------------------------------------|
| ( <b>F6</b> ) (XCOORD) | Stores an x-coordinate, or calculates the x-coordinate when a radius and angle have been stored. |

- (F7) (YCOORD)** Stores a y-coordinate, or calculates the y-coordinate when a radius and angle have been stored.
- (F8) (RADIUS)** Stores the radius, or calculates the radius when x- and y-coordinates have been stored.
- (F9) (ANGLE)** Stores an angle, or calculates the angle when x- and y-coordinates have been stored.

## To use the probability functions

Combinations, permutations, factorials, and random numbers are included in the probability functions.

1. From the Applications menu, choose Math (**Alt** **A** **M**).
2. Press **(F10)** (More) three times to display the probability functions.
3. Type or calculate a number in the Calc line.
4. Choose any of the following options:

| Use this key       | To do this                                                                                                                                                                                                                                                                                                     |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>(F2)</b> (X)    | Store $x$ for calculating combinations and permutations.                                                                                                                                                                                                                                                       |
| <b>(F3)</b> (Y)    | Store $y$ for calculating combinations and permutations.                                                                                                                                                                                                                                                       |
| <b>(F4)</b> (Cx,y) | Calculate combinations—the number of different sets containing $y$ items that can be taken from a larger group of $x$ items. Different orders of the same $y$ items are not counted separately.                                                                                                                |
| <b>(F5)</b> (Px,y) | Calculate permutations—different <i>arrangements</i> of $y$ items that can be taken from a group of $x$ items. Different orders of the same $y$ items are counted.                                                                                                                                             |
| <b>(F6)</b> (N!)   | Calculate the factorial of the last number in the Calc line.                                                                                                                                                                                                                                                   |
| <b>(F7)</b> (SEED) | Store a <i>seed</i> —a number that initiates a sequence of pseudo-random numbers. Storing 0 uses a random seed from the system clock. To specify a particular seed, type the seed (a non-zero number) and press <b>(F7)</b> (Seed). You can repeat a random number sequence by storing the same non-zero seed. |
| <b>(F8)</b> (RAN#) | Display a random number between 0 and 1.                                                                                                                                                                                                                                                                       |

### Example: Calculating combinations and permutations

How many different basketball teams can a coach put on the floor from a group of 12 players? How many starting lineups (where an order is specified), could the coach hand the announcer?

1. From the Applications menu, choose Math ((**Alt**) (**A**) (**M**)).
2. Press (**F10**) (More) three times to display the probability functions.
3. Store the following values:

Type this

12 (**F2**)

5 (**F3**)

To store this value

X (total pool of players).

Y (number of players in a starting lineup).

4. Press (**F4**) (Cx,y) to calculate the total number of teams possible.

The Calculator displays the result: **COMB = 792.00**. Notice that the total number of permutations (starting lineups) is also calculated and shown in the display area.

### Example: Calculating random numbers

For an initial seed of 0.5, what are the first three numbers generated?

1. From the Applications menu, choose Math ((**Alt**) (**A**) (**M**)).
2. Press (**F10**) (More) three times to display the probability functions.
3. Type .5 (**F7**) to store the seed value.
4. Press (**F8**) (RAN#) to generate the first random number: 0.50.
5. Press (**F8**) (RAN#) to generate the second random number: 0.76.
6. Press (**F8**) (RAN#) to generate the third random number: 0.84.

### Example: Calculating a factorial

1. From the Applications menu, choose Math ((**Alt**) (**A**) (**M**)).
2. Press (**F10**) (More) three times to display the probability functions.
3. Type 5 (**F6**) (N!) to calculate the factorial of 5 ( $5 \times 4 \times 3 \times 2 \times 1$ ).

The Calculator displays the result: **120.00**

---

The Financial Applications

---

# The Financial Applications

## In This Chapter

The Calculator provides two financial applications that let you quickly and easily solve a full range of financial problems: the *Business*, and the *Time Value of Money* applications.

In this chapter, you'll learn how to

- ▶ Solve business percentage problems.
- ▶ Calculate markup and margin.
- ▶ Calculate loans and investments.
- ▶ Calculate amortization.
- ▶ Calculate interest-rate conversions.

In addition to this chapter, there are two other sections that provide information about the financial applications:

- Chapter 8, "Practical Examples," shows how to solve real estate, investment, and personal finance problems.
- Chapter 9, "Calculator Preference," lists the Business and Time Value of Money functions.

## Using the Financial Applications

To solve problems with the financial applications, you simply enter values in the display area by *typing* them in the Calc line, and then *choosing* the appropriate function keys. You then choose other function keys to calculate new values using the ones you've entered. For example, to calculate a percent change with the Business application:

1. From the Applications menu, choose Business (**Alt** **A** **B**).
2. Store the following values:

| Type this          | To do this                                    |
|--------------------|-----------------------------------------------|
| 1000 ( <b>F3</b> ) | Enter 1000 as the old value.                  |
| 1500 ( <b>F4</b> ) | Enter 1500 as the new value.                  |
| ( <b>F5</b> )      | Calculate %CHG = 50.00 as the percent change. |

It's just that simple. The financial function keys are displayed across the bottom of the application screens. Often, there are more functions available than can be displayed on a single screen. To see additional functions, just press (**F10**) (More).

Type 1000 and press F3 to enter 1000 as the Old value.

Business function keys

Displays more functions

| HP Financial Calculator                       |        |        |         |          |         |            |          |      |      |
|-----------------------------------------------|--------|--------|---------|----------|---------|------------|----------|------|------|
| File Edit Clear Application View Options Help |        |        |         |          |         |            |          |      |      |
| C 000                                         | S STO  | R RCL  | T LAST  | V R+     | M +/-   | Z x+y      | X 1/x    | Q √x | Y yx |
| Old value.....                                |        |        |         |          | Old     | = 1,000.00 |          |      |      |
| New value.....                                |        |        |         |          | New     | = 0.00     |          |      |      |
| Percent change.....                           |        |        |         |          | %CHG    | = 0.00     |          |      |      |
| Total amount.....                             |        |        |         |          | Total   | = 0.00     |          |      |      |
| Part of total.....                            |        |        |         |          | Part    | = 0.00     |          |      |      |
| Percent of total.....                         |        |        |         |          | %Total  | = 0.00     |          |      |      |
| old = 1,000.00                                |        |        |         |          |         |            |          |      |      |
| F1 Help                                       | F3 Old | F4 New | F5 %CHG | F7 Total | F8 Part | F9 %Total  | F10 More |      |      |
| Business                                      |        |        |         |          | ALG DEG |            |          |      |      |

## Business Percentage Calculations

You use the Business application on the Applications menu to solve business percentage problems. Don't convert percentages to their decimal equivalents when solving percentage problems—the HP Calculator does this for you automatically. For example, don't type .04 for 4%. Type it the way you see and say it: 4 %.

In this section you'll find step-by-step procedures and detailed examples to help you solve business percentage problems, including the following tasks:

- ▶ Starting the Business application.
- ▶ Calculating percent change.
- ▶ Calculating percent of total.
- ▶ Calculating markup and margin.

### To start the Business application

- From the Applications menu, choose Business ((Alt) **A** **B**).

The screenshot shows the HP Financial Calculator interface. At the top is a menu bar with options: File, Edit, Clear, Application, View, Options, Help. Below the menu bar is a row of function keys: C 000, S STO, R RCL, T LAST, V R+, W +/-, Z x=y, X 1/x, Q sqrt(x), and Y yx. The main display area shows several calculation results: Old value = 0.00, New value = 0.00, Percent change = 0.00, Total amount = 0.00, Part of total = 0.00, and Percent of total = 0.00. Below this, a status line displays '0.00'. At the bottom, there is a row of function keys: F1 Help, F3 Old, F4 New, F5 %CHG, F7 Total, F8 Part, F9 %Total, and F10 More. Below this row, the 'Business' application is selected, and the mode is set to 'ALG DEG'.

The Status line shows the current application.



## To calculate percent change

The following two examples show you how to calculate percent change.

### Example: Calculating a percent change in sales

Last year, total sales for your company reached \$110,000. This year, sales are \$115,000. What is the percent change between last year's sales and this year's?

1. From the Applications menu, choose Business (**Alt** **A** **B**).
2. Store the following values:

Type this

110000 (**F3**)

115000 (**F4**)

To store this value

Old value (last year's sales).

New value (this year's sales).

3. Press (**F5**) (%CHG) to calculate the change in sales from last year to this.

The Calculator displays the result: % CHG = 4.55.

### Example: Calculating a 12% increase in sales

You own a small business. What will this year's sales have to be to show a 12% increase from last year? Last year's sales were \$110,000.

1. From the Applications menu, choose Business (**Alt** **A** **B**).
2. Store the following values:

Type this

110000 (**F3**)

12 (**F5**)

To store this value

Old value (last year's sales).

Percent change (needed sales increase).

3. Press (**F4**) (New) to calculate the needed sales for this year.

The Calculator displays the result: New = 123,200.00

You will need to sell \$123,200 worth of merchandise to realize a 12% increase in sales.

---

## To calculate percent of total

The following examples show you how to calculate percent of total.

### **Example: Calculating cash assets as a percent of total assets**

Total assets for your company are \$675,840. The company has \$234,567 cash on hand. What percentage of total assets is cash on hand?

1. From the Applications menu, choose Business (**Alt**) (**A**) (**B**).
2. Store the following values:

Type this  
675840 (**F7**)  
234567 (**F8**)

To store this value  
Total amount (your company's total assets).  
Part of total (your cash on hand).

3. Press (**F9**) (%Total) to calculate the percent of total.

The Calculator displays the result: % Total = 34.71. About 35% of your total assets are available in cash.

### **Example: Calculating salary as a percent of operating expenses**

Last year, your company incurred salary expenses that amounted to 45% of operating expenses. If operating expenses were \$76,249, how much were salary expenses?

1. From the Applications menu, choose Business (**Alt**) (**A**) (**B**).
2. Store the following values:

Type this  
76249 (**F7**)  
45 (**F9**)

To store this value  
Total amount (operating expenses).  
Percent of total (salary expenses).

3. Press (**F8**) (Part) to calculate salary expenses.

The Calculator displays the result: Part = 34,312.05.

## To calculate markup and margin

The Calculator lets you calculate cost, selling price, markup, and margin. Markup calculations are expressed as a percent of *cost*. Margin is expressed as a percent of *price*.

### Example: Calculating markup

The standard markup on running shoes at your store is 60%. You just received a shipment of running shoes costing \$49.00 a pair. What is the retail price per pair of shoes?

1. From the Applications menu, choose Business (Alt A B).
2. Press (F10) (More) to display the Markup and Margin keys.
3. Store the following values:

Type this

49 (F6)

60 (F8)

To store this value

Cost (store's cost).

Markup (standard markup).

4. Press (F7) (Price) to calculate the selling price for running shoes.

The screenshot shows the HP Financial Calculator interface. At the top, the title bar reads "HP Financial Calculator". Below it is a menu bar with "File", "Edit", "Clear", "Application", "View", "Options", and "Help". The main display area shows the following values:

|             |                |
|-------------|----------------|
| Cost.....   | Cost = 49.00   |
| Price.....  | Price = 78.40  |
| Markup..... | Markup = 60.00 |
| Margin..... | Margin = 37.50 |

Below the main display area, there is a status bar showing "Price = 78.40". At the bottom, there are several function keys: F1 (1:sp), F6 Cost, F7 Price, F8 Markup, F9 Margin, and F10 More. The "Business" application is selected, and the "ALG DEG" mode is indicated.

The display area keeps a record of your calculations.

### Example: Calculating margin

Your company purchases designer blue jeans for \$25.00 a pair. You then sell the jeans for \$59.00. What is the profit margin for your store?

1. From the Applications menu, choose Business (**Alt** **A** **B**).
2. Press **F10** (More) to display the Markup and Margin keys.
3. Store the following values:

Type this

25 **F6**

59 **F7**

To store this value

Cost (store's cost).

Price (store's selling price).

4. Press **F9** (Margin) to calculate the profit margin for blue jeans.

The Calculator displays the result: **Margin = 57.63**. Your profit margin for blue jeans is about 58%.

| HP Financial Calculator                       |       |         |        |          |                 |           |       |           |      |
|-----------------------------------------------|-------|---------|--------|----------|-----------------|-----------|-------|-----------|------|
| File Edit Clear Application View Options Help |       |         |        |          |                 |           |       |           |      |
| C 0.00                                        | S STO | R RCL   | T LAST | V R+     | N +/-           | Z x=y     | X 1/x | Q sqrt    | V yx |
| Cost.....                                     |       |         |        |          | Cost = 25.00    |           |       |           |      |
| Price.....                                    |       |         |        |          | Price = 59.00   |           |       |           |      |
| Markup.....                                   |       |         |        |          | Markup = 136.00 |           |       |           |      |
| Margin.....                                   |       |         |        |          | Margin = 57.63  |           |       |           |      |
| Margin = 57.63                                |       |         |        |          |                 |           |       |           |      |
| F1 Help                                       |       | F6 Cost |        | F7 Price |                 | F8 Markup |       | F9 Margin |      |
| Business                                      |       |         |        |          | ALG DEG         |           |       |           |      |

### Example: Using margin and markup together

Your company buys cords of wood at a cost of \$79.60 a cord. If you use a 25% markup, what is the selling price of a cord of wood?

1. From the Applications menu, choose Business (**Alt** **A** **B**).
2. Press **(F10)** (More) to display the Markup and Margin keys.
3. Store the following values:

Type this

79.60 **(F6)**

25 **(F8)**

To store this value

Cost (company's purchase price for wood).

Markup (company's 25% standard markup).

Notice that the Calculator calculates the profit margin automatically when you enter the markup.

4. Press **(F7)** (Price) to calculate the selling price.

The Calculator displays the result: Price = 99.50.

# Time Value of Money

The phrase *time value of money* describes calculations based on money and interest over a period of time. In this section you'll find step-by-step procedures and detailed examples to help you solve cash flow problems, including the following tasks:

- ▶ Starting the TVM application.
- ▶ Understanding cash flow diagrams.
- ▶ Calculating monthly payments.
- ▶ Comparing two TVM cases.

## To start the TVM application

- From the Applications menu, choose TVM ((Alt) (A) (T)).

Time Value of Money  
variable names

The screenshot shows the HP Financial Calculator interface. At the top is a menu bar with 'File', 'Edit', 'Clear', 'Application', 'View', 'Options', and 'Help'. Below the menu bar is a row of function keys: C 0.00, S STO, R RCL, T LAST, Y R+, N +/-, Z x+y, X 1/x, Q sqrt, and Y yx. The main display area shows a list of variables and their values: Number of periods.....N = 0.00, Interest.....I%YR = 0.00, Present value.....PV = 0.00, Payments.....PMT = 0.00, Future value.....FV = 0.00, Payments per year.....P/YR = 12, and Begin/End mode.....B/E = END. Below this list is a large display showing '0.00'. At the bottom is a row of function keys: F1 Help, F2 N, F3 I%YR, F4 PV, F5 PMT, F6 FV, F7 P/YR, F8 BE, F9 Amort, and F10 Iconv. Below the function keys is a status bar showing 'Time Value of Money - Case 1' and 'ALG DEG'.

| Variable                   | Value |
|----------------------------|-------|
| Number of periods.....N    | 0.00  |
| Interest.....I%YR          | 0.00  |
| Present value.....PV       | 0.00  |
| Payments.....PMT           | 0.00  |
| Future value.....FV        | 0.00  |
| Payments per year.....P/YR | 12    |
| Begin/End mode.....B/E     | END   |

0.00

Time Value of Money - Case 1    ALG DEG

The examples in this section require that you know values for the basic mortgage components— $N$ ,  $I\%$ ,  $PV$ ,  $PMT$ , and  $FV$ . For a particular problem, some of these values may not be known. However, if any four elements are known (as well as the settings for  $P/YR$  and  $B/E$  mode), the Calculator can find the remaining unknown value. This section provides step-by-step examples to calculate:

- ▶ Monthly loan payments.
- ▶ Future value of a savings account.

## To solve for unknown values

### To solve for this

$N$   
 $I\%$   
 $PV$   
 $PMT$   
 $FV$

### You must know these values

$I\%$ ,  $PV$ ,  $PMT$ ,  $FV$ ,  $P/YR$ ,  $END$  or  $BEGIN$   
 $N$ ,  $PV$ ,  $PMT$ ,  $FV$ ,  $P/YR$ ,  $END$  or  $BEGIN$   
 $N$ ,  $I\%$ ,  $PMT$ ,  $FV$ ,  $P/YR$ ,  $END$  or  $BEGIN$   
 $N$ ,  $I\%$ ,  $PV$ ,  $FV$ ,  $P/YR$ ,  $END$  or  $BEGIN$   
 $N$ ,  $I\%$ ,  $PV$ ,  $PMT$ ,  $P/YR$ ,  $END$  or  $BEGIN$

## To store financial data

### Use this key

**(F8)** ( $B/E$ )  
**(F7)** ( $P/YR$ )  
**(F2)** ( $N$ )  
**(F3)** ( $I\%$ )  
**(F4)** ( $PV$ )  
**(F5)** ( $PMT$ )  
**(F6)** ( $FV$ )

### To store this value

$BEGIN$  or  $END$  mode.  
Number of payments per year.  
Total number of payments.  
Annual interest rate as a percent.  
Initial loan balance (use the correct cash-flow sign).  
Periodic payment (use the correct cash-flow sign).  
Future value or balloon payment.

## When to Use TVM

You can use the Time Value of Money (TVM) application to solve financial problems involving *regular* cash flows—that is, cash flows that meet the following criteria:

- The dollar amount is the same for each payment.
- The payments occur at regular intervals.
- The payment periods coincide with the compounding periods.

## Where Does the Money Go?

The following financial calculations deal with *cash flows* (the movement of money in financial transactions). The cash flow for a transaction depends on your point of view. For example, a loan is an initial *positive* cash flow for the borrower (money coming in). The same transaction is a negative cash flow for the lender (money going out).

The examples in this manual take the individual's point of view to track cash flows. Money you *receive* is a positive value. Money that is paid out is a *negative* value—for example, a deposit into your savings account or a mortgage payment to your bank. This is not the same as a debit or credit. Money in your savings account is still your money. The cash flow simply tracks the direction the money moved, which is away from you. This is important to understand because you'll need to key in positive and negative cash flows in some of the following calculations.

## Setting BEGIN or END Mode

Before you start a TVM calculation, you need to check whether the payment is due at the beginning or end of the first period. Will you make your first payment the day the loan closes? Then set the mode to **BEGIN**. Will you have a one-month waiting period before making the first payment? Then set the mode to **END**. Loans and mortgages usually use **END** mode while leases and savings plans usually use **BEGIN** mode.



---

## To set BEGIN or END mode

1. Press **(F8)** (B/E) to switch between BEGIN and END modes.  
The current mode is shown in the Calculator display area.
- 

## To calculate monthly payments

The following examples illustrate how to calculate monthly payments.

### Example: Calculating monthly payments on a car loan

You are purchasing a car with a 3-year loan at 10.5% annual interest, compounded monthly. The purchase price of the car is \$11,250, and your down payment is \$2,500.00. What are your monthly payments?

1. From the Applications menu, choose TVM (**(Alt)** **(A)** **(T)**).
2. Clear any previous data (**(Alt)** **(C)** **(D)**).

This sets the mode to END and the number of payments per year to 12.

3. Store the following values:

| Type this              | To store this value                          |
|------------------------|----------------------------------------------|
| 3*12 <b>(F2)</b>       | Number of Periods (payments).                |
| 10.5 <b>(F3)</b>       | Annual interest (rate).                      |
| 11250-2500 <b>(F4)</b> | Present value (cost minus the down payment). |

Notice that the future value of the loan is 0.00. This is because the loan will be paid off completely in 3 years.

4. Press **(F5)** (PMT) to calculate your monthly payment.

The Calculator displays the result: **-284.40**. The result is expressed as a negative cash flow (money you must pay out). Your monthly payment is \$284.40.

# Calculating Interest Rate Conversions

Interest rates are generally stated as *nominal annual interest rates*. A nominal annual interest rate is an annual rate that is compounded *periodically*—for example, 18% per year, compounded monthly (12 times per year).

When investments have different compounding periods, *effective interest rates* are used to compare them. The effective rate is the annual rate that would produce the same interest earnings as the nominal rate compounded  $P$  times per year. For example, earning 18% annual rate compounded monthly (nominal rate) is equivalent to earning 19.56% effective annual interest.

This section provides examples and step-by-step instructions for calculating interest rate conversions, including the following:

- ▶ Comparing interest rates.
- ▶ Converting interest rates.

## To display the Interest Conversion screen

1. From the Applications menu, choose TVM (**Alt** **A** **T**).
2. Press **F10** (Iconv) to display the interest conversion function keys.

The screenshot shows the HP Financial Calculator interface. At the top is a menu bar with File, Edit, Clear, Application, View, Options, and Help. Below the menu bar is a row of function keys: C 0.00, S STO, R RCL, T LAST, V V+, M +/-, Z x<y, X 1/x, Q sqrt, and Y y^x. The main display area shows the following data:

|                             |       |   |       |
|-----------------------------|-------|---|-------|
| Nominal annual rate.....    | 1%YR  | = | 0.00  |
| Periodic interest rate..... | 1%PER | = | 0.00  |
| Effective annual rate.....  | EFF%  | = | 0.00  |
| Payments per year.....      | P/YR  | = | 12.00 |
| Continuous annual rate..... | CONT  | = | 0.00  |
| 360/365 annual rate.....    | 360/5 | = | 0.00  |

Below the display area is a numeric keypad showing 0.00. At the bottom, there is a row of function keys: F1 Help, F3 %YR, F4 %PER, F5 EFF%, F7 P/YR, F8 CONT, F9 360/5, and F10 TVM. Below this row is a label "TVM Interest Rate Conversions" and a small box containing "ALG DEG".

## To convert interest rates

Once you've opened the interest conversion screen, converting interest rates with the Calculator is an easy two-step process.

1. From the Applications menu, choose TVM (**Alt** **A** **T**).
2. Press **F10** (Iconv) to display the interest conversion functions.
3. Type the Number of payments per year, and press **F7** (P/YR).
4. Type the interest rate and choose the appropriate type, for example, **F3** (I%YR) for the nominal annual rate, or **F5** (EFF) for the effective annual rate.

The Calculator calculates and displays the corresponding interest rates for each type. Click on an interest rate in the Display area, or press its function key to display the value in the Calc line.

You can convert any of these interest rates with the Calculator.

| HP Financial Calculator                                                                                                                                                                                                                         |                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
| File                                                                                                                                                                                                                                            | Edit Clear Application View Options Help                  |
| C 0.00                                                                                                                                                                                                                                          | S STO R RCL T LAST Y R+ N +/- Z x+y X 1/x Q sqrt Y y^x    |
| Nominal annual rate.....I%YR = 7.50<br>Periodic interest rate.....I%PER = 0.63<br>Effective annual rate.....EFF% = 7.76<br>Payments per year.....P/YR = 12.00<br>Continuous annual rate.....CONT = 7.48<br>360/365 annual rate.....360/5 = 7.37 |                                                           |
| I%YR = 7.50                                                                                                                                                                                                                                     |                                                           |
| F1 Help                                                                                                                                                                                                                                         | F3 I%YR F4 I%PER F5 EFF% F7 P/YR F8 CONT F9 360/5 F10 TVM |
| TVM Interest Rate Conversions ALG DEG                                                                                                                                                                                                           |                                                           |

### About Interest Rates

|       |                                                                                                                                                                                                                                                                                                                                                                                  |
|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I%YR  | Stores or calculates the <i>nominal annual percentage</i> rate per year, frequently called the APR.                                                                                                                                                                                                                                                                              |
| I%PER | Stores or calculates the <i>periodic interest</i> rate (I%YR / P/YR). The periodic rate is the nominal annual rate divided by the number of compounding periods. For example, a conventional mortgage might have a nominal annual rate of 8%. This would result in a periodic (monthly) rate of 0.67 (8%/12).                                                                    |
| EFF%  | Stores or calculates the effective annual rate. This interest rate is derived from the nominal annual rate and the number of compounding periods. It is the rate that would be equivalent to the nominal rate, but with a single compounding period. For example, a nominal annual mortgage rate of 10% (with monthly compounding) is equivalent to an effective rate of 10.47%. |
| CONT  | Stores or calculates the continuously compounded rate, that is, the rate assuming an infinite number of compounding periods.                                                                                                                                                                                                                                                     |
| 360/5 | Stores or calculates the effective annual rate (derived from the nominal annual rate and 360 compounding periods), then compounded for 365 periods. This is a highly specialized method used in the banking industry.                                                                                                                                                            |

## To calculate and compare interest rates

The following examples illustrate how to calculate an effective annual interest rate, and how to compare two different interest rates.

### Example: Calculating an effective annual rate

You are considering investing a portion of your savings. You have two investment options. The first pays 13.6% annual interest, compounded daily. What is the effective rate of return? 5

1. From the Applications menu, choose TVM ((Alt) (A) (T)).
2. If necessary, clear any previous data ((Alt) (C) (D)).
3. Press (F10) (Iconv) to display the interest conversion functions.
4. Store the following values:

Type this

365 (F7)

13.6 (F3)

To store this value

Payments per year (compounded daily).

Nominal annual rate.

The Calculator enters the Nominal annual rate and returns an effective annual rate of 14.57%.

### Example: Comparing two interest rates

You have another investment opportunity that pays 14.0% compounded semi-annually. Which investment will give you the highest effective rate?

1. Complete steps 1 through 4 in the previous calculation to find the first effective rate.
2. Store the following values for investment 2:

Type this

2 (F7)

14.0 (F3)

To store this value

Payments per year (semi-annual).

Nominal annual rate.

The Calculator enters the Nominal annual rate and returns an effective annual rate of 14.49%. The effective annual rate for investment 1 is higher than that for investment 2.



---

## Currency and Other Unit Conversions

---

# Currency and Other Unit Conversions

## In This Chapter

With the Calculator, you can calculate currency exchange rates. You can also convert between units of measure—for example, converting kilometers to miles, grams to ounces, or gallons to liters. In this chapter, you'll learn how to

- ▶ Convert between different currencies.
- ▶ Convert between different units of length, area, volume, mass, and temperature.



## Using the Conversion Application

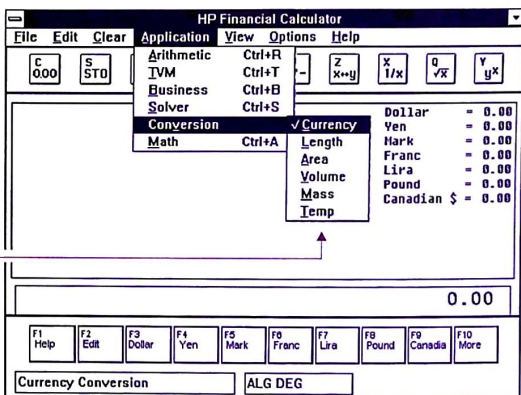
With the Calculator, you perform currency calculations based on exchange rates that you set. You can also add new currencies and rename existing ones. This section provides step-by-step instructions for converting currency and other units, including the following tasks:

- ▶ Starting the Conversion application.
- ▶ Setting exchange rates.
- ▶ Calculating exchange rates.
- ▶ Adding a new currency to the calculator.
- ▶ Converting between different units of measure.

6

### To start the Conversion application

1. From the Applications menu, choose Conversions ((Alt) (A) (V)).
2. Choose a conversion option from the list.



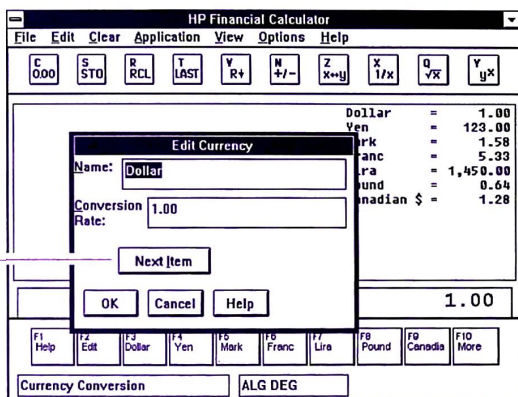
You can convert any of these units with the Conversion application.

## To set a conversion rate

1. From the Applications menu, choose Conversion ((Alt) (A) (V)).
2. From the Conversion menu, choose Currency ((C)).
3. Press (F2) (Edit) to display the Edit Currency dialog box.
4. Choose Next Item to display the currency you want to set.
5. In the Conversion Rate box, type the conversion rate.
6. Choose OK to set the conversion rate and close the dialog box.

If you choose Next Item after typing a conversion rate, that information is *discarded*. Repeat this procedure to set as many conversion rates as you like.

Press Next Item to scroll through the currency list.



## To calculate currency exchanges

1. From the Applications menu, choose Conversion ((Alt) (A) (V)).
2. From the Conversion menu, choose Currency ((C)).
3. Type the amount you're converting.
4. Choose a function key for the currency you're converting.

For example, to convert 300 U.S. dollars, type: 300 (F3). The Calculator converts and displays the equivalent amounts for all the other currencies. To enter one of the currency values into the Calc line, press its function key or click on its value in the display area.

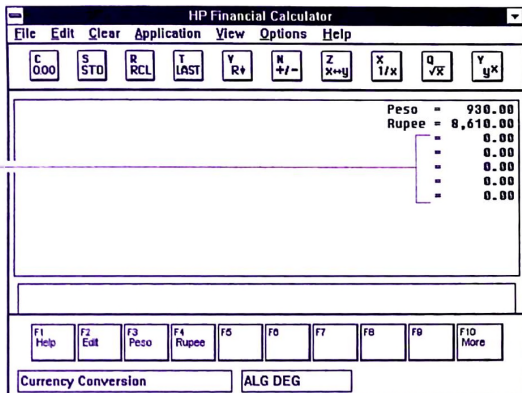
6

300 dollars

is equal to these  
unit amounts.

| HP Financial Calculator                       |         |           |        |         |                                                                                                                                        |         |          |           |          |
|-----------------------------------------------|---------|-----------|--------|---------|----------------------------------------------------------------------------------------------------------------------------------------|---------|----------|-----------|----------|
| File Edit Clear Application View Options Help |         |           |        |         |                                                                                                                                        |         |          |           |          |
| C 000                                         | S STO   | R RCL     | T LAST | Y R+    | N +/-                                                                                                                                  | Z X=ij  | X 1/x    | Q sqrt    | Y yx     |
|                                               |         |           |        |         | Dollar = 300.00<br>Yen = 36,900.00<br>Mark = 474.00<br>Franc = 1,599.00<br>Lira = 435,000.00<br>Pound = 192.60<br>Canadian \$ = 384.00 |         |          |           |          |
| Dollar = 300.00                               |         |           |        |         |                                                                                                                                        |         |          |           |          |
| F1 Help                                       | F2 Edit | F3 Dollar | F4 Yen | F5 Mark | F6 Franc                                                                                                                               | F7 Lira | F8 Pound | F9 Canada | F10 More |
| Currency Conversion                           |         |           |        |         | ALG DEG                                                                                                                                |         |          |           |          |

If you choose Next Item after adding the new Name and Conversion Rate, that information is *discarded*. You can repeat this procedure to add up to five new currencies.



---

## To edit the currency list

You can edit (or rename) a currency or Conversion Rate with the following procedure.

1. From the Applications menu, choose Conversion (**Alt** **A** **V**).
2. From the Conversion menu, choose Currency (**C**).
3. Press (**F10**) (More) until the currency you want to change is displayed.
4. Press (**F2**) (Edit).
5. Choose Next Item until the currency you want to change is displayed in the Name box.
6. Edit the Name or Conversion Rate, then choose OK.

If you choose Next Item after editing the currency Name or Conversion Rate, that information is *discarded*.

Repeat this procedure to edit as many currencies as you like.

---

## To convert any other unit

Use the following procedure to convert other units of measure, including length, area, volume, mass, and temperature.

1. From the Applications menu, choose Conversion (**Alt** **A** **V**).
2. Choose a conversion option from the list.
3. Type a value and press the function key corresponding to its unit.

If the unit you want isn't currently displayed, remember that (**F10**) (More) displays another screen of related units for most unit types.

### Example: Converting 1 mile to meters

1. From the Applications menu, choose Conversion ((Alt) (A) (V)).
2. Choose Length ((L)).
3. Type 1 (F2) to enter 1 mile.

The Calculator converts and displays the equivalent amounts for other units of length. To enter one of the values into the Calc line, press its function or click on its value in the display area.

The screenshot shows the HP Financial Calculator interface with the Conversion application open. The menu bar includes File, Edit, Clear, Application, View, Options, and Help. Below the menu bar are function keys: C 000, S STO, R RCL, T LAST, Y R+, N +/-, Z x+y, X 1/x, Q sqrt(x), and Y y^x. The main display area shows a list of units and their equivalent values for 1 mile:

|                  |       |   |              |
|------------------|-------|---|--------------|
| Miles.....       | Mile  | = | 1.00         |
| Yards.....       | Vard  | = | 1,760.00     |
| Feet.....        | Foot  | = | 5,280.00     |
| Inches.....      | Inch  | = | 63,360.00    |
| Kilometers.....  | km    | = | 1.61         |
| Meters.....      | meter | = | 1,609.34     |
| Centimeters..... | cm    | = | 160,934.40   |
| Millimeters..... | mm    | = | 1,609,344.00 |

Below the list, the current conversion is displayed as "Mile = 1.00". At the bottom, there are function keys F1 Help, F2 Mile, F3 Yard, F4 Foot, F5 Inch, F6 km, F7 meter, F8 cm, F9 mm, and F10 More. A "Length Conversion" label is visible on the left, and "ALG DEG" is on the right.

Click on a value in the Display area, or press its function key, to recall it to the Calc line.

---

Solving Equations

---

# Solving Equations

## In This Chapter

The Solver application lets you enter your own equations with variables into the Calculator. You can solve for any of the variables using special function keys, one for each of your variables. You can name your equations and save them in the Solver Catalog for later use. In this chapter, you'll learn how to

- ▶ Write and edit Solver equations.
- ▶ Solve for unknown variables.
- ▶ Use guesses to see alternate solutions.
- ▶ Create multiple equation files.

## More Solver Information

In addition to this chapter, there are two other sections that provide information about the Solver application:

- Chapter 8, "Practical Examples," shows you how to use the Solver to solve real estate, investment, and personal finance problems.
- Chapter 9, "Calculator Reference," lists the Solver functions that you can use in Solver equations.



## Using the Solver Application

This section provides step-by-step procedures for writing and editing Solver equations, including the following:

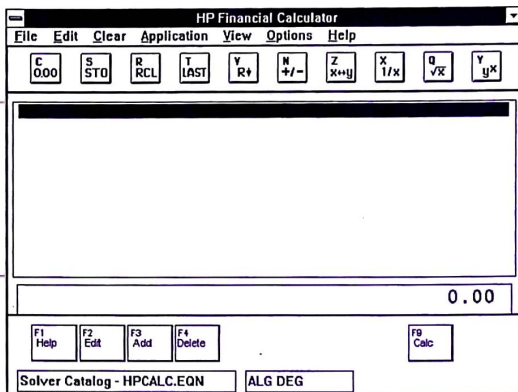
- ▶ Starting the Solver application and displaying the equation list.
- ▶ Adding Solver equations to the catalog.
- ▶ Changing the order of variables in an equation.
- ▶ Editing and deleting solver equations.

### To start the Solver application

- From the Applications menu, choose Solver ((Alt) (A) (S)).

The Calculator displays the current catalog (list) of Solver equations. Until you create some equations, your list will be empty—as in the following illustration.

New, blank  
equation list



---

## To add an equation to the catalog

The Solver equation catalog can contain as many equations as you like, limited only by the OmniBook's memory.

1. From the Applications menu, choose Solver ((Alt) (A) (S)).
2. Press (F3) (Add).
3. In the Edit Equation dialog box, type your equation.

Keep the following rules in mind when writing equations:

|                     |                                                                                                                                                                                                 |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Equation length     | The length of your equation can be up to 3000 characters.                                                                                                                                       |
| Variable names      | Variable names can be up to 15 characters in length. Variable names are case sensitive.                                                                                                         |
| Number of variables | A single equation can have up to 256 variables. If your equation has more than eight variables, the Solver creates the (F10) (More) function key to enable you to access all of your variables. |
| Spaces              | To improve readability, you can add spaces throughout an equation. However, you cannot add spaces within variable or function names.                                                            |
| Comments            | You can add comments by starting and ending the comment with an exclamation point (!).                                                                                                          |
| Line breaks         | To improve clarity, you can break an equation at any point by pressing (Enter), except in variable and function names.                                                                          |

4. In the Name box, type a name (optional) and choose OK.

The equation name can be up to 15 characters in length. The name can contain any ASCII characters except the left bracket ({}), right bracket (}), or the bar symbol (|).

5. Press (F9) (Calc) to check the equation for syntax errors and prepare to solve it.

**Example: Adding an equation to calculate carpet price**

Suppose you frequently buy carpet and need to calculate how much it will cost. The price quoted to you is per square yard. Regardless of how you do the calculation (even if you do it longhand), you use an equation:

$$\begin{array}{ccccc} \text{Price (per sq yd)} & & \text{Length (feet)} & & \text{Width (feet)} \\ & & | & & | \\ & & \text{PPSY} \times L \times W & & \\ & & \hline & & 9 & & = \text{COST} \\ & & | & & \\ & & \text{Converts square feet to square yards.} & & \end{array}$$

1. From the Applications menu, choose Solver (**Alt** **A** **S**).
2. Press **F3** (Add).
3. In the Equation box, type the following equation:  
$$\text{PPSY} * L * W / 9 = \text{COST}$$
4. In the Name box, type a name for the equation, for example **Carpet Costs**, and choose OK.
5. Press **F9** (Calc) to check the equation and display the Solve Calc screen.

The Calculator displays your equation and creates the following variables for you to use when calculating carpet costs:

PPSY = the price per square yard  
L = length of area to be carpeted  
W = width of area to be carpeted  
COST = total cost of carpet

## To solve an equation

You can solve an equation if you know the values for all variables except one. You find the unknown value by solving the equation.

1. In the Solver Catalog screen, select the equation and press **(F9)** (Calc).
2. For each known variable, type its value and press its function key.
3. For the unknown variable, simply press its function key.

### Example: Calculating the carpet price

You have a \$300.00 carpet budget and you want to carpet 10- by 15-foot room. How much per square yard can you afford to pay.

1. If necessary, press **(▲)** or **(▼)** to select the Carpet Costs equation.
2. Press **(F9)** (Calc) to verify the equation and display the equation variables.

Your equation

The Calculator lists your equation variables ...

... and also assigns each to a function key for easy access.

The screenshot shows the HP Financial Calculator interface. At the top is a menu bar with 'File', 'Edit', 'Clear', 'Application', 'View', 'Options', and 'Help'. Below the menu is a row of function keys: C 0.00, S STD, R RCL, T LAST, Y R+, N +/-, Z x+y, X 1/x, Q sqrt(x), and Y y^x. The main display area shows the equation 'Carpet Costs: PPSY \* L \* W / 9 = COST'. To the right of the equation, the variables are listed with their values: PPSY = 18.00, L = 15.00, W = 10.00, and COST = 300.00. Below this, the equation is repeated as 'PPSY = 18.00'. At the bottom, there is a row of function keys: F1 Help, F2 PPSY, F3 L, F4 W, F5 COST, and F10 Solver. Below this row are two buttons: 'Solver Calc - HPCALC.EQN' and 'ALG DEG'.

| Variable | Value  |
|----------|--------|
| PPSY     | 18.00  |
| L        | 15.00  |
| W        | 10.00  |
| COST     | 300.00 |

- Enter the following values:

Type this

300 (F5)

15 (F3)

10 (F4)

To enter this value

Cost (your budget).

L (length of room).

W (width of room).

- Press (F2) (PPSY) to calculate the price per square yard that fits in your budget.

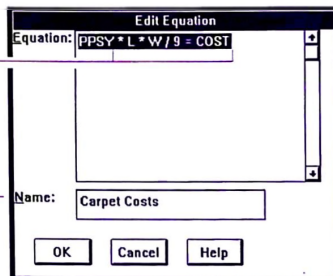
The Calculator displays the result:  $PPSY = 18.00$ . You can quickly go back to the Solver Catalog by pressing (F10) (Solver) or (Esc).

## To edit an equation

- From the Applications menu, choose Solver ((Alt) (A) (S)).
- Select the equation you want to edit.
- Press (F2) (Edit).
- In the Edit Equation dialog box, type your changes and choose OK.

You can include spaces and new lines for readability.

Type a descriptive name up to 15 characters in length.



---

## To change the order of variables

The Solver assigns variables to function keys according to the order in which they appear in the equation. You can change the function key assignments with the following syntax added to the beginning of your equation.

$0*(var1+var2+ \dots )+$

For example, to change the order of variables in the *Carpet Costs* equation, type:

$0*(L+W+PPSY+COST)+PPSY * L * W / 9 = COST.$

The Calculator will assign the variables in the order you specified—L, W, PPSY, and COST.

---

## To clear variables

When solving equations from the Calc screen, you can clear—set to zero—the variables at any time with Clear Data from the Clear menu.

1. From the Applications menu, choose Solver ((Alt) (A) (S)).
2. Select the equation whose variables you want to clear.
3. Choose (F9) (Calc) to go to the Calc screen.
4. From the Clear menu, choose Data ((Alt) (C) (D)).

### Sharing Variables

If two or more equations contain the same variable name, that variable (and its value) is shared with all the equations in which it occurs. For example, you might have three equations that define variables for the following:

1. Inventory cost to produce units.
2. Expected revenue from shipping those units.
3. Resulting profit or loss.

You have to enter or solve for the variables in only *one* equation—they will automatically be available to the other two.

---

## To delete a single equation

1. From the Applications menu, choose Solver ((Alt) (A) (S)).
2. Move the selection bar to the equation you want to delete.
3. Press (F4) (Delete).
4. Choose one of the following options:

| <u>Select this</u> | <u>To do this</u>                           |
|--------------------|---------------------------------------------|
| Equation           | Delete the equation only.                   |
| Variables          | Delete only the variables for the equation. |
| Both               | Delete both the equation and its variables. |

Note that variables with the same name are *shared* among all equations in the Calculator. If you delete the variables for one equation, they are deleted for all equations that use them. Deleted variables are recreated each time you solve for the equation.

5. Choose OK.

---

## To delete all equations at once

1. From the Applications menu, choose Solver ((Alt) (A) (S)).
2. From the Clear menu, choose Data ((Alt) (C) (D)).
3. When prompted, choose Yes to confirm that you want to delete all equations.

The Calculator deletes all equations and associated variables in the list.

## To recover deleted equations

If you delete one or all of your equations in error, you can recover them with this procedure.

1. From the File menu, choose Exit.
2. When the Calculator prompts you to save the equation file you just deleted, choose No.
3. Press **[Fn]+[F5]** to start the Calculator again.

The Calculator opens the Solver again with the original equation file displayed.



## Using Conditional Expressions in Equations

This section describes how to use conditional expressions in Solver equations using the IF function. For a complete list of Solver functions that you can type in equations, see chapter 9, "Calculator Reference."

The following example illustrates the correct syntax for the IF function:

**BONUS=IF(SALES>3000, .02 \* SALES, .01 \* SALES).**

The two commas inside the parentheses stand for "THEN" and "OR ELSE." So in the equation above, if *SALES* is greater than 3000, then *BONUS* equals  $.02 \times \text{SALES}$ ; otherwise, *BONUS* equals  $.01 \times \text{SALES}$ .

In general, the form of the IF function is:

**IF** (*conditional expression*, *algebraic expression*, *algebraic expression*)

A conditional expression can also be an algebraic expression. If the algebraic expression evaluates to zero, it is interpreted as false. Otherwise, true. For example, if *A* equals - 1 in the algebraic expression *A* + 1, the expression is false. If *A* equals any other number, the expression is true.

The logical and relational operators that can be used in conditional expressions are described in the list below:

### Operators Used in Conditional Expressions

|                      |                                                                                                                                       |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Logical Operators:   | NOT, AND, OR, XOR                                                                                                                     |
| Relational Operators | > (Greater than)<br>< (Less than)<br>= (Equal to)<br>>= (Greater than or equal to)<br><= (Less than or equal to)<br><> (Not equal to) |

---

## Understanding How the Solver Works

Initially, the Solver tries to find a *direct* solution by rearranging the equation and then solving for the variable. If the Solver finds a direct solution, the Calculator displays the answer on the Calc line, and no other information is displayed.

If the Solver is unable to find a direct solution, the Solver tries to find an *iterative* solution. This involves searching for the answer by estimating a set of answers, seeing how close they are to a solution, and then making another set of estimates. The Calculator displays the current estimates ("guesses") while the Solver is searching for an answer iteratively. You should keep in mind that *there may be more than one solution to an equation*, and that it may be necessary for you to enter guesses in order to influence which solution the Solver finds.

Since the process of finding an iterative solution is very complex, there are four possible outcomes that you should be aware of:

- The Calculator displays an answer but displays no message. It is very likely that the Solver has found a solution. The Calculator may display additional information if you repeat the calculation by pressing the function key for the variable you solved for.
- The Calculator displays an answer and automatically displays a message. The Solver has found a possible solution, but you must use judgement in interpreting the results.
- The Calculator displays **Try again. Bad guesses.** This indicates that the Solver cannot begin the search with the current guesses. For information about entering guesses, see page 7-13.
- The Calculator displays **Solution not found** because the Solver was unable to find a solution. Check to see if your equation and stored values are correct. If the equation is correct, you may be able to find a solution by entering guesses.

---

### To stop and start an iterative search

When the Solver is searching for an iterative solution, you can halt the calculation by pressing any key. The Calculator displays the best estimate the Solver has found so far, and the message **Interrupted**. You can restart the search from where it left off by pressing the function key for the variable you are solving for. Or, you can restart the search entering your own guesses.

---

## To enter one guess and start solving

Entering your own guesses serves two purposes. First, it can save time by telling the Solver where to start searching. Second, if more than one solution exists, using guesses can help the Solver select the answer you want. The closer your guesses are to the answer you want, the better chance the Solver has of finding the solution you want.

You can enter one or two guesses. If you enter one guess, the Solver makes a 7 second guess, close to the first one.

- Type a value for the variable and press the function key twice.

---

## To enter two guesses

If you enter two guesses, the Solver starts searching for a solution in the range between the two guesses. The Solver works most efficiently when the answer is between your two guesses.

1. Type a value for the first guess and press the function key.
2. Type a value for the second guess and press the function key twice.

### When You Can Enter Guesses

- Before beginning the calculation, after you've stored a value for every variable except the unknown variable.
- After you've stopped the iterative search.
- After the Solver has returned an answer and you want to begin searching for another answer somewhere else.

## Working With Multiple Equation Files

You can create as many equation files as you like—each with a list of equations for the Solver. This section provides step-by-step procedures for working with equation files, including the following:

- ▶ Saving changes to the equation list.
- ▶ Saving an equation list in another file.
- ▶ Opening an existing equation file.
- ▶ Creating a new, empty equation list.

7

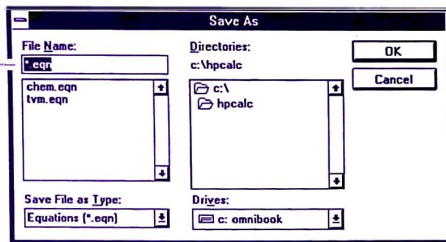
### To save the equation catalog in a new file

1. From the Applications menu, choose Solver (**Alt** **A** **S**).
2. From the File menu, choose Save As.
3. Type a file name.

Your file name can be a maximum of eight characters in length. Don't type an extension for your file. The Calculator adds the .EQN extension for you automatically. This is the only extension allowed.

4. Choose OK to save your equations in a new file.

The Calculator adds the .EQN extension for you.



---

## To save changes to your equation list

As you add and edit your Solver equations, *save them frequently*.

1. From the Applications menu, choose Solver (**Alt** **A** **S**).
2. From the File menu, choose Save.

The Calculator saves the current equation list under the current name—shown in the status line.

7

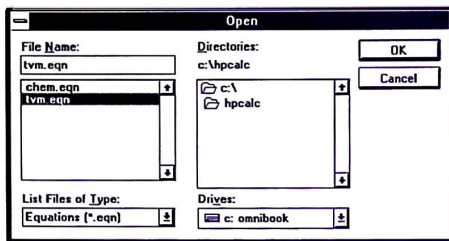
---

## To open an existing equation file

1. From the Applications menu, choose Solver (**Alt** **A** **S**).
2. From the File menu, choose Open.

The Calculator prompts you to save the current file if you have not done so.

3. Select the file you want to open, and choose OK.



---

## To create a new equation file

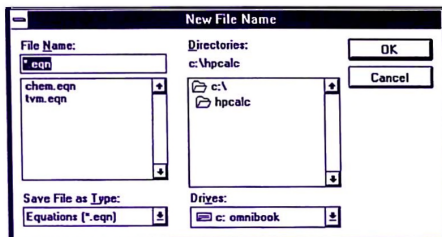
1. From the File menu, choose New ((Alt) (F) (N)).

The Calculator prompts you to save the current file if you have not done so.

2. Type a name for the new file.

Don't type an extension for the file. The Calculator adds the .EQN extension for you.

3. Choose OK to create and open the new file.



---

## Practical Examples

---

# Practical Examples

## In This Chapter

This chapter contains specialized examples that help you to solve real estate, investment, and personal finance problems. Before you begin to use this chapter, you should be familiar with basic Calculator concepts (chapter 3), the Financial applications (chapter 5), and the Solver (chapter 7).

You can solve the problems in this section in a variety of ways, using different applications. So that you can quickly find different types of examples, the application we chose is displayed in the margin next to each problem.

For easy reference, the problems and solutions in this chapter are divided into the following sections:

- ▶ Real estate.
- ▶ Savings and investment.
- ▶ Personal finance.



---

## Real Estate Examples

The examples in this section require that you know values for the basic mortgage components— $N$ ,  $I\%$ ,  $PV$ ,  $PMT$ , and  $FV$ . For a particular problem, one of these values may not be known. If any four elements are known (as well as the settings for  $P/YR$  and  $B/E$  mode), the Calculator can find the remaining unknown value. This section provides step-by-step examples to calculate:

- ▶ The annual interest rate of a loan.
- ▶ A balloon payment.
- ▶ A quarterly payment.
- ▶ A Canadian mortgage.

## To calculate an annual interest rate

A property has an existing loan of \$100,000 with monthly payments of \$1,106.20 for 30 years. What is the annual interest rate of the loan? In this problem, the *known* values are the loan amount (PV), total number of payments (N), and the monthly payment (PMT).

TVM

1. From the Applications menu, choose TVM.
2. Clear any previous data ((Alt) (C) (D)).

This sets the mode to END and the number of periods to 12.

3. Store the known values:

Type this

30\*12 (F2)

100000 (F4)

1106.20 +/- (F5)

To store this value

N (number of payments).

PV (loan amount).

PMT (monthly payment as a negative flow).

4. Press (F3) (I%YR) to calculate the annual interest rate.

enter the known values: N, PV, PMT to calculate the annual interest rate.

| HP Financial Calculator                                                                                                                                                                                                             |       |         |             |        |         |         |        |           |           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------|-------------|--------|---------|---------|--------|-----------|-----------|
| File                                                                                                                                                                                                                                | Edit  | Clear   | Application | View   | Options | Help    |        |           |           |
| C 000                                                                                                                                                                                                                               | S STD | R RCL   | T LAST      | V R+   | N +/-   | Z x<=>y | X 1/x  | Q sqrt(x) | Y y^x     |
| Number of periods.....N = 360.00<br>Interest.....I%YR = 13.00<br>Present value.....PV = 100,000.00<br>Payments.....PMT = -1,106.20<br>Future value.....FV = 0.00<br>Payments per year.....P/YR = 12<br>Begin/End mode.....B/E = END |       |         |             |        |         |         |        |           |           |
| I%YR = 13.00                                                                                                                                                                                                                        |       |         |             |        |         |         |        |           |           |
| F1 Help                                                                                                                                                                                                                             | F2 N  | F3 I%YR | F4 PV       | F5 PMT | F6 FV   | F7 PAYR | F8 B/E | F9 Amort  | F10 Iconv |
| Time Value of Money - Case 1                                                                                                                                                                                                        |       |         |             |        | ALG DEG |         |        |           |           |

## To calculate a balloon payment

You have a \$750,000 loan with monthly payments of \$9,483.33 and a 15% annual interest rate. What is the balloon payment due at the end of year 10?

TVM

1. From the Applications menu, choose TVM.
2. Clear any previous data ((**Alt**) (**C**) (**D**)).

This sets the mode to **END** and the number of periods to 12.

3. Store the known values:

Type this

10\*12 (**F2**)

15 (**F3**)

750000 (**F4**)

9483.33 (**+/-**) (**F5**)

To store this value

**N** (number of payments).

**I%YR** (annual interest rate).

**PV** (loan amount).

**PMT** (monthly payment as a negative flow).

4. Press (**F6**) (**FV**) to calculate the amount of the balloon payment.

| HP Financial Calculator      |       |         |             |        |         |                  |             |          |           |
|------------------------------|-------|---------|-------------|--------|---------|------------------|-------------|----------|-----------|
| File                         | Edit  | Clear   | Application | View   | Options | Help             |             |          |           |
| C 000                        | S STO | R RCL   | T LAST      | Y R+   | N +/-   | Z x+y            | X 1/x       | Q √x     | Y yx      |
| Number of periods.....N      |       |         |             |        |         | =                | 120.00      |          |           |
| Interest.....I%YR            |       |         |             |        |         | =                | 15.00       |          |           |
| Present value.....PV         |       |         |             |        |         | =                | 750,000.00  |          |           |
| Payments.....PMT             |       |         |             |        |         | =                | -9,483.33   |          |           |
| Future value.....FV          |       |         |             |        |         | =                | -720,185.74 |          |           |
| Payments per year.....P/YR   |       |         |             |        |         | =                | 12          |          |           |
| Begin/End mode.....B/E       |       |         |             |        |         | =                | END         |          |           |
|                              |       |         |             |        |         | FV = -720,185.74 |             |          |           |
| F1 Help                      | F2 N  | F3 I%YR | F4 PV       | F5 PMT | F6 FV   | F7 P/YR          | F8 B/E      | F9 Amort | F10 Iconv |
| Time Value of Money - Case 1 |       |         |             |        |         | ALG DEG          |             |          |           |

The **FV** or your  
balloon payment.

## To calculate a quarterly payment

You have purchased a \$200,000 mortgage at 12% annual interest with quarterly payments and a \$150,000 balloon payment due at the end of 5 years. What is the quarterly payment?

TVM

1. From the Applications menu, choose TVM.
2. Clear any previous data ((Alt) C (D)).

This sets the mode to **END** and the number of periods to 12.

3. Store the known values:

Type this

4 (F7)

5\*4 (F2)

12 (F3)

200000 (F4)

150000 +/- (F6)

To store this value

P/YR (4 payments per year).

N (5 years of quarterly payments).

I%YR (annual interest rate).

PV (loan amount).

FV (balloon payment amount).

4. Press (F5) (PMT) to calculate the quarterly payment amount.

HP Financial Calculator

File Edit Clear Application View Options Help

C 0.00 S STO R RCL T LAST Y R+ N +/- Z x+/- X 1/x Q sqrt Y yx

|                            |   |             |
|----------------------------|---|-------------|
| Number of periods.....N    | = | 20.00       |
| Interest.....I%YR          | = | 12.00       |
| Present value.....PV       | = | 200,000.00  |
| Payments.....PMT           | = | -7,860.79   |
| Future value.....FV        | = | -150,000.00 |
| Payments per year.....P/YR | = | 4           |
| Begin/End mode.....B/E     | = | END         |

Quarterly payment PMT = -7,860.79

F1 Help F2 N F3 I%YR F4 PV F5 PMT F6 FV F7 P/YR F8 B/E F9 Amort F10 Iconv

Time Value of Money - Case 1 ALG DEG

## To calculate a Canadian mortgage

In Canadian mortgages, the compounding periods and payment periods are not the same. Interest is compounded semi-annually while payments are made monthly. The following Solver equation named **Canada** can be used to calculate Canadian mortgages.

### Solver

1. From the Applications menu, choose Solver (**Alt** **A** **S**).
2. Press **F3** (Add).
3. In the Equations box, type the following equation:  

$$FV(N, ((1+CI\%YR/200)^{(1/6)}-1)*1200, PV, PMT, 12, 0)=FV$$
4. In the Name box, type **Canada**, and choose OK.
5. Press **F9** (Calc) to check the equation and display the Solver Calc screen.

After using the TVM application, you'll find that the Solver Calc screen looks familiar. However, you now have the new variable **CI%YR** (Canadian Interest per Year). Also, the function keys are assigned variables according to the order they appear in the equation.

The Calculator creates the following variables for you to use when calculating Canadian mortgages:

|              |                                                                 |
|--------------|-----------------------------------------------------------------|
| <b>N</b>     | = the total number of payment periods for the life of the loan. |
| <b>CI%YR</b> | = the annual (Canadian) interest rate as a percent.             |
| <b>PV</b>    | = the loan amount or present value.                             |
| <b>PMT</b>   | = the periodic payment amount.                                  |
| <b>FV</b>    | = the remaining balance or future value.                        |

### Example: Calculating a Canadian mortgage

What is the monthly payment required to fully amortize a 30-year, \$50,000 Canadian mortgage if the interest rate is 9%?

Solver

1. From the Applications menu, choose Solver ((Alt) (A) (S)).
2. Select the equation named **Canada**, and press (F9) (Calc).
3. Store the known values:

Type this

30\*12 (F2)

9 (F3)

50000 (F4)

0 (F6)

To store this value

N (payments per year).

CI%YR (Canadian annual interest).

PV (loan amount).

FV (future value is set to zero).

4. Press (F5) (PMT) to calculate your Canadian mortgage payment.

The Calculator displays the result: -396.42.

The screenshot shows the HP1 Financial Calculator interface. At the top, the title bar reads "HP1 Financial Calculator". Below it is a menu bar with "File", "Edit", "Clear", "Application", "View", "Options", and "Help". The main display area shows the equation "Canada:  $FV(N, ((1 + CI\%YR/200)^{(1/6)} - 1) \dots$ ". To the right of the equation, a list of variables and their values is displayed: N = 360.00, CI%YR = 9.00, PU = 50,000.00, PMT = -396.42, and FU = 0.00. Below the equation and variable list, the result "PMT = -396.42" is shown. At the bottom, there is a row of function keys: F1 Help, F2 N, F3 CI%YR, F4 PV, F5 PMT, F6 FV, and F10 Solver. Below these keys, there are two input fields: "Solver Calc - HPCALC.EQN" and "ALG DEG".

Equation name

Equation

### Example: Calculating the interest rate for a Canadian mortgage

A Canadian mortgage has monthly payments of \$612.77 with a maturity of 25 years. The principal amount is \$75,500. What is the annual interest rate?

Solver

1. From the Applications menu, choose Solver ((Alt) (A) (S)).
2. Select the equation named *Canada*, and press (F9) (Calc).
3. Clear any previous data ((Alt) (C) (D)).
4. Store the known values:

Type this

612.77 (+/-) (F5)

75500 (F4)

25\*12 (F2)

0 (F6)

To store this value

PMT (periodic payment amount).

PV (principal amount).

N (total number of payments).

FV (future value is set to zero).

5. Press (F3) (CI%YR) to calculate the annual interest rate.

The Calculator displays the result: 8.75.

HP Financial Calculator

File Edit Clear Application View Options Help

C 000 S STO R RCL T LAST V R+ W +/- Z x+y X 1/x D sqrt Y yx

Canada:  $FV(N, ((1+CI\%YR/200)^{(1/6)}-1) \dots$

N = 300.00  
CI%YR = 8.75  
PU = 75,500.00  
PMT = -612.77  
FU = 0.00

CI%YR = 8.75

F1 Help F2 N F3 CI%YR F4 PV F5 PMT F6 FV F10 Solver

Solver Calc - HPCALC.EQN ALG DEG

---

## Savings and Investment Examples

The purpose of this section is to provide a set of examples to assist you in analyzing your savings, housing, and other investments. This section provides step-by-step examples to calculate:

- ▶ Returns on various savings plans.
- ▶ Deposits needed to meet a cash flow need.
- ▶ Estimating monthly mortgage payments.

---

### To calculate return on savings

The following examples are presented as guidelines for evaluating savings plans. You will be using the TVM application, so remember the cash flow sign when entering dollar amounts—money paid out is entered as a negative number; money received is entered as a positive number.

#### Example: Calculating a deposit today to reach a future balance

How much money would you have to invest today if you want \$10,000 in 10 years? Assume the interest rate is 9%, compounded annually.

TVM

1. From the Applications menu, choose TVM.
2. Clear any previous data (**Alt** **C** **D**).
3. Store the known values:

| Type this       | To store this value          |
|-----------------|------------------------------|
| 1 <b>F7</b>     | P/YR (payments per year).    |
| 10000 <b>F6</b> | FV (future value).           |
| 9 <b>F3</b>     | I%YR (annual interest rate). |
| 10 <b>F2</b>    | N (number of payments).      |

4. Press **F4** (PV) to calculate the needed deposit.

The Calculator displays the result: -4,224.11. You'll need to deposit \$4,224.11 today to have \$10,000 in 10 years.



### Example: Calculating monthly deposits to reach a future balance

You plan to replace your car in 3 years, and you want to have \$6,000 to help pay for the new one. How much should you save each month, beginning today, to accumulate \$6,000 in 3 years? Assume 7.5% interest, compounded monthly.

TVM

1. From the Applications menu, choose TVM.
2. Clear any previous data ((Alt) (C) (D)).
3. Set the mode to BEGIN ((F8)).
4. Store the known values:

Type this

3\*12 (F2)

7.5 (F3)

6000 (F6)

0 (F4)

To store this value

N (number of payments).

I%/YR (annual interest rate).

FV (future value).

PV (present value is set to zero.)

5. Press (F5) (PMT) to calculate your monthly deposits.

The Calculator displays the result: -148.21.

### Example: Calculating a savings balance after regular deposits

You have just opened a savings account with a \$200.00 deposit. If you deposit \$50.00 a month, and the account earns  $5\frac{1}{4}\%$  compounded monthly, how much will you have in the account in 3 years.

TVM

1. From the Applications menu, choose TVM.
2. Clear any previous data ((Alt) (C) (D)).  
This sets the mode to END and the number of periods to 12.
3. Store the known values:

Type this

3\*12 (F2)

5.25 (F3)

200 +/- (F4)

50 +/- (F5)

To store this value

N (number of payments).

I%/YR (annual interest rate).

PV (initial deposit).

PMT (your regular deposits).

4. Press (F6) (FV) to calculate your balance in 3 years.

The Calculator displays the result: 2,178.94.

## To estimate monthly mortgage payments

When comparison shopping for a mortgage, it is often useful to estimate the monthly payment. This procedure calculates the approximate mortgage payment given the purchase price, tax rate per \$1,000, down payment (as a percent), interest rate, and length of the loan.

This example assumes that the assessed value is 100% of the sale price and does not include financing of the closing costs. Remember to use the cash flow sign—money paid out is negative; money received is positive.

TVM

1. From the Applications menu, choose TVM ((**Alt**) (**A**) (**T**)).
2. Clear any previous data ((**Alt**) (**C**) (**D**)).

This sets the mode to END and the number of periods to 12.

3. Store the number of payments in P/YR ((**F7**)).
4. Store the annual interest rate in I/YR ((**F3**)).
5. Store the number of payments in N ((**F2**)).
6. Store the purchase price in memory ((**STO**) (**1**)).
7. Calculate the loan amount (purchase price minus the down payment) and store in PV ((**F4**)).
8. Press (**F5**) (PMT) to calculate the mortgage payment.
9. Press (**+**) and add the following calculation to the payment:

The tax rate divided by 1000, multiplied by the value of the house ((**RCL**) (**1**)), divided by the number of payments per year ((**RCL**) (**F7**)).

---

## Personal Finance

This set of examples is designed to serve as a reference to analyze your personal financial needs and to show you how the Calculator can help. This section provides step-by-step examples to calculate:

- ▶ Advance payments (leasing).
- ▶ The cost of an insurance policy.

---

### To calculate lease payments

Leasing agreements sometimes call for extra payments to be made when the transaction is closed. A residual value (salvage value) can also exist at the end of the normal term.

The following equation named **Leasing** calculates the monthly payment and the annual yield when one or more payments are made in advance. You can modify it to accommodate periods other than monthly by changing the number 12 to the appropriate number of payment periods.

8

#### Solver

1. From the Applications menu, choose Solver (**Alt**) (**A**) (**S**).
2. Press (**F3**) (Add).
3. In the Equation box, type the following equation:  
$$PMT = (-PV - FV * (SPPV(I\%YR/12, N))) / (USPV(I\%YR/12, N - \#ADV) + \#ADV)$$
4. In the Name box, type **Leasing**.
5. Press (**F9**) (Calc) to check the equation and display the Solver Calc screen.

The Calculator creates the following variables for you to use in leasing problems:

|             |                                          |
|-------------|------------------------------------------|
| <b>PMT</b>  | = the monthly payment amount.            |
| <b>PV</b>   | = the value of the equipment.            |
| <b>FV</b>   | = the residual value.                    |
| <b>I%YR</b> | = the annual interest rate as a percent. |
| <b>N</b>    | = the total number of payments.          |
| <b>#ADV</b> | = the number of advance payments.        |

### Example: Calculating a lease with advance payments

You've leased some equipment worth \$750.00 for 12 months. The equipment is assumed to have no salvage value at the end of the lease. You agree to make three payments at the time of closing. What is the monthly payment if the annual interest rate is 10%?

Solver

1. From the Applications menu, choose Solver (**Alt** **A** **S**).
2. Select the equation named Leasing, and press (**F9**) (Calc).
3. Store the known values:

Type this

750 (**F3**)

12 (**F6**)

0 (**F4**)

3 (**F7**)

10 (**F5**)

To store this value

PV (value of the equipment).

N (number of payments).

FV (the residual value).

#ADV (number of advance payments).

I%YR (annual interest rate).

4. Press (**F2**) (PMT) to calculate your monthly payment.

The Calculator displays the result: PMT = -64.45.

The screenshot shows the HP Financial Calculator interface. At the top is a menu bar with File, Edit, Clear, Application, View, Options, and Help. Below the menu bar is a row of function keys: C 000, S STO, R RCL, T LAST, V R+, N +/-, Z x+y, X 1/x, Q sqrt, and Y yx. The main display area shows the equation "Leasing: PMT=(-PV-FU\*(SPPU(1%YR/12,N..))" on the left and the calculated values on the right: PMT = -64.45, PU = 750.00, FU = 0.00, 1%YR = 10.00, N = 12.00, and #ADV = 3.00. Below the main display area is a large box showing the result "PMT = -64.45". At the bottom of the calculator is a row of function keys: F1 Help, F2 PMT, F3 PV, F4 FV, F5 1%YR, F6 N, F7 #ADV, and F10 Solver. Below this row are two boxes: "Solver Calc - HPCALC.EQN" and "ALG DEG".

## To calculate the price of an insurance policy

The cost of an insurance policy, other than term life insurance, is rarely apparent at first glance. The price should include not only the premium payments, but also the interest that could have been earned on the cash value or *savings portion* of the policy.

The following equation named **Insurance** calculates the price per \$1,000 of protection for one policy year and the interest rate earned on the savings portion of the policy.

Reference: Joseph M. Belth, *Life Insurance—A Consumer's Handbook*, Indiana University Press, 1973, p. 234.

### Solver

1. From the Applications menu, choose Solver ((Alt) A (S)).
2. Press (F3) (Add).
3. In the Equation box, type the following equation:  

$$INS = ((PREM + LVAL) * (1 + I\%/100) - VAL - DIV) / (.001 * (FACE - VAL))$$
4. In the Name box, type **Insurance**, and press (F9) (Calc) to check the equation and display the Solver Calc screen.

The Calculator creates the following variables for you to use in insurance problems:

|      |                                                            |
|------|------------------------------------------------------------|
| INS  | = the price per \$1,000 of protection in one policy year.  |
| PREM | = the annual premium amount.                               |
| LVAL | = the value of the policy at the end of the previous year. |
| I%   | = the rate as a percent.                                   |
| VAL  | = the value of the policy at end of the current year.      |
| DIV  | = the dollar value of the dividend for one year.           |
| FACE | = the face value of the policy for one year.               |

### Example: Calculating the price of an insurance policy

You are evaluating your \$50,000 insurance policy. The premium of \$1,010 is due at the beginning of the year, and a dividend of \$165 is received at the end of the policy year. The cash value of the policy is \$3,302 at the beginning of the year, and it will grow to \$4,104 by the end of the year. You can earn 6% on a savings account. What is the price per \$1,000 protection per year?

Solver

1. From the Applications menu, choose Solver ((Alt) (A) (S)).
2. Select the equation named **Insurance**, and press (F9) (Calc).
3. Store the known values:

Type this

1010 (F3)

3302 (F4)

6 (F5)

4104 (F6)

165 (F7)

50000 (F8)

To store this value

PREM (annual premium).

LVAL (value of the policy at the end of the previous year).

I% (the interest rate you could get elsewhere).

VAL (value of the policy at the end of this year).

DIV (annual dividend).

FACE (face value of the policy).

4. Press (F2) (INS) to calculate your protection cost.

The Calculator displays the result: 6.57. Your protection cost is \$6.57 per \$1,000 face (protection) value per year.

---

## Calculator Reference

---

# Calculator Reference

## In This Chapter

Functions are the tools the Calculator provides for calculating values. This chapter lists and defines the functions included with the HP Calculator. For easy reference, the Calculator functions are separated into the following categories:

- ▶ Business functions.
- ▶ Time value of money functions.
- ▶ Amortization functions.
- ▶ Interest conversion functions.
- ▶ Math and trig functions.
- ▶ Solver functions that you enter.



---

# Business Functions

## OLD

Stores or calculates the old value.

## NEW

Stores or calculates the new value.

## %CHG

Stores or calculates the percent change.

## TOTAL

Stores or calculates the total value.

## PART

Stores or calculates the part of the total value.

## %TOTAL

Stores or calculates the percent of the total value.

## COST

Stores or calculates the cost.

## PRICE

Stores or calculates the price.

## MARKUP

Stores or calculates the difference between price and cost, expressed as a percentage of the cost.

## MARGIN

Stores or calculates the difference between price and cost, expressed as a percentage of the price.

---

## Time Value of Money Functions

### AMORT

Displays the Amortization screen.

### ICONV

Displays the Interest Conversion screen.

### B/E

Switches between payments at the beginning and payments at the end of periods.

### P/YR

Stores the number of payments or compounding periods per year.

### N

Stores or calculates the total number of payments or compounding periods. Returns the number of periods for an investment based on periodic, constant payments and a constant interest rate.

### I%YR

Stores or calculates the nominal annual interest rate as a percentage.

### PV

Stores or calculates the present value or lump sum value of a series of future payments (loan or future investment). Returns the present value of an investment based on periodic, constant payments and a constant interest rate.

### PMT

Stores or calculates the periodic payment of an investment or loan. Returns the payment for an investment based on periodic, constant payments and a constant interest rate.

### FV

Stores or calculates the future value or cash balance after the last payment (amount of final cash flow).

---

## Amortization Functions

### **G0**

Calculates amortization for a group of payments (uses P/YR for a group of payments unless you enter a new number). Choose G0 to calculate the next group of payments.

### **ADJUST**

Displays the Adjust Amortization screen.

### **I/YR**

Stores or calculates the nominal annual interest rate as a percentage.

### **PMT**

Stores or calculates the periodic payment of an investment or loan.  
Returns payment for an investment based on periodic, constant payments and a constant interest rate.

### **BAL**

Calculates the remaining loan balance.

### **INT**

Calculates the portion of the payment applied to interest for the specified periods.

### **ACCUM**

Calculates accumulated interest since the start of amortization (period 0).

### **PRIN**

Calculates the portion of the payment applied to principal for the specified periods.

---

## Interest Conversion Functions

### P/YR

Stores or calculates the number of payments or compounding periods per year.

### I%/YR

Stores or calculates the *nominal annual percentage* rate, frequently called the APR. An interest rate is usually quoted as an annual rate, although it can cover any period of time.

### EFF%

Stores or calculates the *effective annual interest* rate. This interest rate is derived from the nominal annual rate and the number of compounding periods. It is the rate that would be equivalent to the nominal rate, but with a single compounding period.

### I%/PER

Stores or calculates the *periodic interest* rate ( $I\%/YR / P/YR$ ).

### CONT

Stores or calculates the *continuously-compounded* rate, that is, the rate assuming an infinite number of compounding periods.

### 360/5

Stores or calculates the effective annual rate (derived from the nominal annual rate and 360 compounding periods), then compounded for 365 periods. This is a highly specialized method used occasionally in the banking industry.

---

# Math and Trig Functions

## RND

Rounds the number in the Calc line to the displayed number of decimal places. This has no effect if you've set the Number format to All.

## IP

Calculates the integer part of the number in the Calc line.

## FP

Calculates the fractional part of the number in the Calc line.

## ABS

Calculates the absolute value of the number in the Calc line. The absolute value of a number is the number without its sign.

## LN

Calculates the natural (base  $e$ ) logarithm of the positive number in the Calc line.

## E<sup>-X</sup>

Calculates the natural antilogarithm;  $e^x$  of the number in the Calc line.

## LOG

Calculates the common (base 10) logarithm of the positive number in the Calc line.

## 10<sup>X</sup>

Calculates the common (base 10) antilogarithm of the number in the Calc line.

## PI

Returns the number 3.141592653589793, the mathematical constant  $\pi$ , accurate to 16 digits.

## SIN

Calculates the sine of the angle in the Calc line.

## COS

Calculates the cosine of the angle in the Calc line.

## TAN

Calculates the tangent of the angle in the Calc line.

**ASIN**

Calculates the arc sine of the angle in the Calc line.

**ACOS**

Calculates the arc cosine of the angle in the Calc line.

**ATAN**

Calculates the arc tangent of the angle in the Calc line.

**DEG**

Converts the angle in the Calc line from radians to decimal degrees.

**RAD**

Converts the angle in the Calc line from decimal degrees to radians.

**HR**

Converts the number in the Calc line from HMS to decimal hours (or degrees).

**HMS**

Converts the number in the Calc line from decimal hours to HMS.

**XCOORD**

Stores an x-coordinate, or calculates the x-coordinate when a radius and angle have been stored.

**YCOORD**

Stores a y-coordinate, or calculates the y-coordinate when a radius and angle have been stored.

**RADIUS**

Stores the radius, or calculates the radius when x- and y-coordinates have been stored.

**ANGLE**

Stores an angle, or calculates the angle when x- and y-coordinates have been stored.

**X**

Stores x for calculating combinations and permutations ( $Cx,y$  and  $Px,y$ ).

## Y

Stores  $y$  for calculating combinations and permutations ( $Cx,y$  and  $Px,y$ ).

### $Cx,y$

Calculates combinations—the number of different sets containing  $y$  items that can be taken from a larger group of  $x$  items. Different orders of the same  $y$  items are not counted separately.

### $Px,y$

Calculates permutations—the number of different *arrangements* of  $y$  items that can be taken from a larger group of  $x$  items. Different orders of the same  $y$  items are counted separately.

## N!

Calculates the factorial of the number you entered in the Calc line.

## SEED

Stores a *seed*—a number that initiates a sequence of pseudo-random numbers. Pressing 0 uses a new seed from the system clock. Using a seed of 0 causes the system clock to be used to generate an arbitrary seed. You can repeat a random number sequence by storing the same non-zero seed.

## RAN#

Displays a random number between 0 and 1.

## Solver Functions

This section lists the Solver functions. Lowercase characters in parentheses stand for numbers, variable names, or numeric expressions that the functions use in calculations.

### **ABS (*x*)**

Absolute value.

### **ACOS (*x*)**

Arc cosine. Uses the current angle mode—degrees, radians, or grads. To change the angle mode, choose a new mode from the Options menu.

### **ALOG (*x*)**

Common (base 10) antilogarithm;  $10^x$

### **ANGLE (*x*, *y*)**

Returns polar coordinate angle  $\theta$ ; given (*x*, *y*) rectangular coordinates.

### **ASIN (*x*)**

Arc sine. Uses the current angle mode—degrees, radians, or grads. To change the angle mode, choose a new mode from the Options menu.

### **ATAN (*x*)**

Arc tangent. Uses the current angle mode—degrees, radians, or grads. To change the angle mode, choose a new mode from the Options menu.

### **CDATE**

Current date. Uses the current date format, DD.MMYYYY, MM.DDYYYY, or YYYY.MMDD.

### **COMB (*x*, *y*)**

Number of combinations of *x* items taken *y* at a time.

### **COS (*x*)**

Cosine. Uses the current angle mode—degrees, radians, or grads. To change the angle mode, choose a new mode from the Options menu.

### **CTIME**

Current time in HH.MMSS, 24-hour format.

### **DATE (*date*, *n*)**

The date *n* days after (when *n* is positive) or before (when *n* is negative) the specified *date*.



**DDAYS** (*date1*, *date2*, *cal*)

The number of days between dates *d1* and *d2*. Uses the current date format, DD.MMYYYY, MM.DDYyyy, or YYYY.MMDD. *cal* designates the calendar:

*cal*=1 for the actual calendar, which recognizes leap years.

*cal*=2 for the 365-day calendar, which ignores leap years.

*cal*=3 for the 360-day calendar, which uses 12, 30-day months.

**DEG** (*x*)

Converts *x* in radians to decimal degrees.

**EXP** (*x*)

Natural antilogarithm,  $e^x$ .

**EXPM1** (*x*)

$e^x - 1$ .

**FACT** (*x*)

Factorial; *x* is an integer greater than or equal to 0.

**FP** (*x*)

Fractional part.

**FV** (*n*, *i*%, *yr*, *pv*, *pmt*, *p/yr*, *m*)

TVM function for FV.

**HMS** (*x*)

Converts *x* in decimal hours (degrees) to H.MMSS (D.MMSS) format.

**HR** (*x*)

Converts *x* in H.MMSS (D.MMSS) format to decimal format.

**IDIV** (*x*, *y*)

Integer part of the quotient  $x \div y$ .

**IF** (*con*, *alg1*, *alg2*)

If conditional expression *con* is true, use algebraic expression *alg1*; otherwise, use *alg2*.

**Solver Functions****INT (*x*)**The greatest integer less than or equal to *x*.**INV (*x*)**Reciprocal,  $1/x$ .**IP (*x*)**

Integer part.

**I%YR (*n*, *pv*, *pmt*, *fv*, *p/yr*, *m*)**

TVM function for I%YR.

**LN (*x*)**Natural (base *e*) log of *x*.**LNP1 (*x*)** $\ln(1 + x)$ .**LOG (*x*)**Common (base 10) log of *x*.**MAX (*x*, *y*)**Larger of *x* and *y*.**MIN (*x*, *y*)**Smaller of *x* and *y*.**MOD (*x*, *y*)**The remainder of the division  $x \div y$ ;  $\text{MOD}(x, y) = x - y \times \text{INT}(x \div y)$ .**N (*i%yr*, *pv*, *pmt*, *fv*, *p/yr*, *m*)**TVM function for *N*.**PERM (*x*, *y*)**Permutations of *x* items taken *y* at a time.**PI**Approximation of  $\pi$ ; 3.141592653589793 (16 digits).

**PMT** ( $n, i\%yr, pv, fv, p/yr, m$ )

TVM function for *PMT*.

**PV** ( $n, i\%yr, pmt, fv, p/yr, m$ )

TVM function for *PV*.

**RAD** ( $x$ )

Converts  $x$  in decimal degrees to radians.

**RADIUS** ( $x, y$ )

Returns polar coordinate radius  $R$  given ( $x, y$ ) rectangular coordinates.

**RAN#**

Pseudo-random number ( $0 \leq r < 1$ ).

**RND** ( $x, y$ )

$x$  rounded to  $y$  decimal places (when  $0 \leq y \leq 15$ ) or to  $|y|$  significant digits (when  $-16 \leq y \leq -1$ ). When  $y = 16$ ,  $x$  is rounded to number of decimal places given by current display setting.

**SGN** ( $x$ )

Sign of  $x$  (+1 if  $x > 0$ , 0 if  $x = 0$ , -1 if  $x < 0$ ).

**SIN** ( $x$ )

Sine. Uses the current angle mode—degrees, radians, or grads. To change the angle mode, choose a mode from the Options menu.

**SPFV** ( $i\%, n$ )

Future value of a single \$1.00 payment; equivalent to  $(1 + i\% \div 100)^n$ .  $n$  is the number of compounding periods,  $i\%$  is the interest rate per compounding period, expressed as a percentage.

**SPPV** ( $i\%, n$ )

Present value of a single \$1.00 payment; equivalent to  $1 \div \text{SPFV}(i\%, n)$ .  $n$  is the number of compounding periods.  $i\%$  is the interest rate per compounding period, expressed as a percentage.

**SQ** ( $x$ )

Squared of  $x$ ,  $x^2$ .

**SQRT (*x*)**

Square root of *x*;  $\sqrt{x}$ .

**TAN (*x*)**

Tangent. Uses the current angle mode—degrees, radians, or grads. To change the angle mode, choose a mode from the Options menu.

**TRN (*x*,*y*)**

*x* is truncated to *y* decimal places (when  $0 \leq y \leq 15$ ) or to  $|y|$  significant digits (when  $-16 \leq y \leq -1$ ). When *y* equals 16, *x* is truncated to the number of decimal places given by the current display setting.

**USFV (*i*%,*n*)**

Future value of a uniform series of \$1.00 payments; equivalent to  $(SPFV(i\%,n)-1) \div (i\% \div 100)$ . *n* is the number of payments. *i*% is the periodic interest rate, expressed as a percentage.

**USPV (*i*%,*n*)**

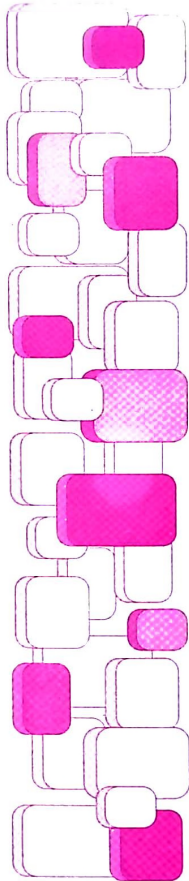
Present value of a uniform series of \$1.00 payments; equivalent to  $USFV(i\%,n) \div SPFV(i\%,n)$ . *n* is the number of payments. *i*% is the periodic interest rate, expressed as a percentage.

**XCOORD (*R*,*θ*;**

x-coordinate of polar coordinates. (Uses the current angle mode—degrees or radians.)

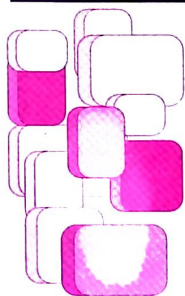
**YCOORD (*R*,*θ*)**

y-coordinate of polar coordinates. (Uses the current angle mode—degrees or radians.)



---

## Part 4: Troubleshooting



---

## Troubleshooting

This part of the manual provides suggestions for fixing problems you may have while using the Personal Information applications.

---

If Things Go Wrong

---

# If Things Go Wrong

## In This Chapter

If you run into problems using the Personal Information applications, you can use the suggestions in this chapter for getting back on track. Also check the contents and index for references to related information.

If you have questions that may not be limited to the Appointment Book, Phone Book, or Calculator, see the *OmniBook Operating Guide*, especially chapter 11. For example, printer problems are discussed in detail there.

If you have questions that the OmniBook manuals don't answer, you can check these additional sources:

- Look at the online Help for the application you're using.
- Contact Hewlett-Packard at the address or phone number on the inside back cover of this manual.

This chapter separates problems into the following categories:

- ▶ Appointment Book Problems.
- ▶ Phone Book Problems.
- ▶ HP Financial Calculator Problems.



# Appointment Book



This section gives suggestions for fixing problems you may have when managing Appointment Book information.

## If alarms aren't occurring as scheduled

- If you're working in MS-DOS, only the first alarm rings. Return to Windows to see any other overdue alarms.

## If you can't find an appointment or event in the Week or Month view

Check your default settings to make sure you're creating items with these options selected.

1. From the Options menu, choose Defaults (**A**lt **O** **D**).
2. Under Appointment and Events, check the display options.

Also, check the item details to see if these options are checked for the individual appointment or event.

## If you can't change the First Hour display setting

Check the Interval in the Display Options dialog box to make sure the format matches the First Hour. For example, if you want to set the First Hour to 9:30, set the interval to 30 minutes. Or if you want a First Hour of 9:45, set the interval to 15 minutes.

---

## Phone Book

This section gives suggestions for fixing problems you may have when managing Phone Book information.

### If the Create command is not available (grayed) on the Subset menu

You have created your maximum 15 subsets. Delete one or more subsets and then you can create another.

### If the column you want to print is not shown in the Print dialog box

If you've hidden a column, it won't be available for printing until you show it again.

1. From the Subset menu, choose Arrange Columns ((Alt) (B) (A)).
2. Choose Show to display the Insert Columns dialog box.
3. Select the column you want to show, and choose OK.

The Phone Books displays the column again as the *last* column in the record—position 14. If necessary, move the column to another position using the Arrange Columns command on the Subset menu.

### If the Phone Book can't find a string of text

Make sure you're searching in the right direction—Find Next searches down and Find Prev searches up. Also, the Phone Book doesn't search the current record so you may need to scroll right or left to see if the text is in the current record.

### If you want to use fax numbers with WinFax LITE

If you have the optional OmniBook Communications Pack you can use your Phone Book fax entries when sending faxes. For complete instructions, see the OmniBook *Communications Guide*.

### If a deleted category reappears in the Category list

The Phone Book creates categories when you add and edit records. Deleting a category doesn't update or change your records, so if you open a record still containing this category, and then close it with OK, the Phone Book recreates it. If you don't want to recreate the category, close the record with Cancel.

### If the subset you created isn't shown

When you create a subset, you don't see the records automatically. You need to view it first.

1. From the Subset menu, choose View (**A**lt **B** **V**).
2. Select the subset you want to view, then choose OK.

### If your displayed subset is empty

Go back and check the subset definition. You may have mistyped information or defined a subset that no records match.

1. From the Subset menu, choose Edit (**A**lt **B** **E**).
2. Select the subset you want to check, then choose OK.

### If the Phone record you copied is incomplete

The Phone Book cannot copy or paste (insert) *hidden* columns. Be sure the columns you want to copy are shown.

1. From the Subset menu, choose Arrange Columns (**A**lt **B** **A**).
2. Choose Show to display the Show Column dialog box.
3. Select the column you want to show, then choose OK.

The Phone Books displays the column again as the *last* column in the record—position 14.

# HP Financial Calculator

This section gives suggestions for fixing problems you may have when working with the HP Financial Calculator.

## **If your numbers contain commas instead of periods (.) as decimal points**

You can set up commas or periods as decimal points in Calculator numbers.

1. From Program Manager, choose Control Panel.
2. Choose International.
3. In the Number Format box, choose Change.
4. In the Decimal Separator box, type a period.
5. Choose OK to close the dialog box.

When you go back to the Calculator, your numbers will be displayed with periods as the decimal points.

## **If you want to change the number of decimal places in the display**

1. From the Options menu, choose Number Format.
2. In the Number Display box, select Fixed Point, Scientific, or Engineering.
3. Type or select the number of digits, and choose OK.

## **If you want to clear *all portions* of Calculator memory**

- From File Manager, delete the file HPCALC.DAT in the C:\HPCALC directory.

This clears all numeric data in the Calculator and resets your modes and options back to the defaults.

## **If calculating the sine (or tangent) of $\pi$ radians displays a very small number instead of 0**

$\pi$  has in *infinite* number of digits and cannot be represented *exactly* with the 16-digit precision of the Calculator. The answer calculated is correct for the 16-digit approximation.

## **If you get incorrect answers when using the trigonometric functions**

You must make sure the Calculator is using the correct angular mode.

- From the Options menu, choose Degrees, Radians, or Grads.

**If you get incorrect answers using the TVM functions**

Be sure to clear all of the TVM variables before starting a new calculation ((**Alt**) (**C**) (**D**)). Check the appropriate payment mode (mortgages and loans are typically End mode calculations), and specify the number of payments per year (P/YR). Also, check that all figures for money paid out are *negative* cash flows and all figures for money received are *positive* cash flows.

**If you want to use the TVM functions from the Solver**

You can use the TVM functions by copying the appropriate financial formulas into your Solver equation. Chapter 9 in this manual lists all of the functions you can use in the Solver along with the correct syntax. Also, see the Solver examples in chapter 8 for examples of TVM equations that you can add to the Solver catalog.

**If you don't know what "e" in a number means—for example, 2.51e-13**

Exponent of 10. For example, 5e3 means 5 *times ten to the 3rd power*, or  $5 \times 10^3$ , or 5,000.00.

**If you don't get the result you expect when pressing an arithmetic key—for example, + or −.**

Check the mode you are using. You may have set it incorrectly.

- From the Options, choose Algebraic or RPN.

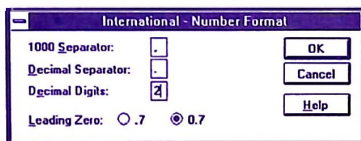
**If you keep getting a parse syntax error when trying to solve an equation**

- Check the length of your variable names. A variable name cannot exceed 15 characters.
- Make sure you have not inserted any spaces within variable or function names.
- Make sure that parentheses match properly in pairs.
- Make sure you have not included "1000 separators" in numbers.
- Make sure the separators between function arguments are commas (only if that's not the decimal separator) or semicolons (;).

### If your Solver equations aren't giving you the results you expect

Be sure that the Decimal Separator setting matches the punctuation in your equations. To change the Decimal Separator setting:

1. From Program Manager, choose Control Panel.
2. From Control Panel, choose International.
3. In the Number Format box, choose Change.
4. Select the Decimal Separator that matches your equations.



# Index

---

## Special characters

- , 1-10
- †, 1-10
- , 1-10
- ✓, 1-10, 1-11
- \$, 1-5, 1-25
- , 1-5, 1-14
- ✱, 1-5, 1-13
- %. *See* percent
- 360/5 function key, 5-20

## A

- ABS, 4-4, 9-7
- absolute value of a number, 4-4
- ACCUM, 9-5
- ACOS, 4-5, 9-8, 9-10
- Add Appointment command, 1-6
- Add Event command, 1-6
- adding
  - a currency to the Calculator, 6-6
  - appointments, 1-6
  - events, 1-6
  - multiple Phone records, 2-4
  - notes, 1-7, 1-9
  - numbers in the Calculator, 3-7
  - Phone Book records, 2-4, 2-29
  - Phone Book subsets, 2-14
  - Solver equations, 7-4
  - tasks, 1-8
  - using memory keys, 3-5
  - values in memory, 3-11
- addition, 3-7
- Add To-Do command, 1-8
- ADJUST, 9-5
- alarms
  - answering, 1-34
  - beeping, 1-34
  - leadtime, 1-32, 1-37
  - resetting, 1-34
  - running a program, 1-33
  - setting, 1-32
  - silencing, 1-34
  - snooze interval, 1-35
  - sounding in MS-DOS, 1-34
  - turning off the sound, 1-34
- Algebraic mode, 3-21
- ALOG, 9-10
- AMORT, 5-15, 9-4
- amortization, 5-15, 9-5
- ANGLE, 4-6, 9-8, 9-10
- angle conversions, 4-5
- annual interest rate, 8-4
- answering alarms, 1-34
- Appointment Book
  - commands, 1-47
  - moving around, 1-52
  - overview, 1-2
  - problem-solving, 10-3
  - problems with, 10-3
  - screen, 1-3
  - setting the time, 1-4
  - starting, 1-3

- Appointment Book files
  - copying, 1-43
  - creating, 1-41
  - extracting items, 1-44
  - HP 100LX, 1-42
  - HP 95LX, 1-43
  - merging, 1-46
  - opening, 1-42
  - removing data, 1-45
- appointment options
  - Alarm Enabled, 1-7
  - Calendar, 1-7
  - Change Repeat, 1-7
  - End Time, 1-7
  - Leadtime, 1-7
  - Location, 1-7
  - Note, 1-7
  - Number of Days, 1-7
  - Start Date, 1-7
  - Start Time, 1-7
  - Type, 1-7
  - View In Month, 1-7
  - View In Week, 1-7
- appointments
  - alarms, 1-32
  - archiving, 1-45
  - backtracking, 1-45
  - copying, 1-15
  - defaults, 1-37
  - defined, 1-5
  - deleting, 1-15
  - editing, 1-15
  - moving, 1-15
  - repeating, 1-25
  - scheduling, 1-6
  - shortcuts, 1-52
- arc cosine of a number, 4-5
- archive files, 1-45
- arc sine of a number, 4-5
- arc tangent of a number, 4-5
- area conversions, 6-7

- Arithmetic calculations
  - addition, 3-7
  - clearing, 3-11
  - division, 3-7
  - in Calc line, 3-5
  - in registers, 3-11
  - multiplication, 3-7
  - rounding, 3-17
  - starting, 3-4
  - subtraction, 3-7
  - using memory keys, 3-5
- Arrange Columns command, 2-22
- ASIN, 4-5, 9-8, 9-10
- ATAN, 4-5, 9-8, 9-10
- attaching notes
  - to appointments, 1-7
  - to events, 1-7
  - to tasks, 1-9
- automatic constant
  - clearing, 3-18
  - setting, 3-17

## B

- BAL, 9-5
- beeping alarms, 1-34
- BEGIN/END mode (TVM), 5-12, 5-13, 9-4
- Business calculations
  - functions, 9-3
  - increase in sales, 5-5
  - margin, 5-8, 5-9
  - markup, 5-7, 5-9
  - percent change, 5-5
  - percent of total, 5-6
  - starting, 5-4
- Business category, 2-5

## C

-  (Clear) button, 3-5



- Cale line
  - clearing, 3-5
  - editing, 3-5
  - entering values, 3-5
  - Exchange button, 3-10
  - Last button, 3-10
  - recalling numbers, 3-11
  - Roll button, 3-9
- Calculator
  - equation files, 7-14
  - mode, 3-21
  - problems with, 10-6
  - starting, 3-3
- Calculator applications
  - Arithmetic, 3-4
  - Business, 5-4
  - Conversion (currency and unit), 6-2
  - Interest Rate Conversions, 5-18
  - Solver, 7-2
  - Time Value of Money, 5-10
- calendar (Appointment Book), 1-7
- carrying tasks forward, 1-9
- cases (TVM), 5-14
- categories (Phone Book)
  - built-in, 2-5
  - Business, 2-5
  - created automatically, 2-6
  - defining subsets with, 2-17
  - deleting, 2-6
  - including in a record, 2-5
  - limited by number of characters, 2-6
  - Personal, 2-5
  - sorting with, 2-5
- CDATE, 9-10
- Change Repeat command
  - appointments, 1-7
  - events, 1-7
  - tasks, 1-9
- changing
  - appointments and events, 1-15
  - date format, 1-4
  - OmniBook date, 1-4
  - OmniBook time, 1-4
  - priorities (tasks), 1-10
  - repeating appointments, 1-31
  - tasks (To-Do), 1-15
  - time format, 1-4
  - time of an appointment, 1-13
  - TVM BEGIN/END mode, 5-13
- checking off tasks, 1-11
- checking status of tasks, 1-10
- %CHG, 9-3
- clearing. *See* deleting
  - all Calculator memory, 10-6
  - automatic constant, 3-18
  - Calc line, 3-5
  - data in Solver variables, 7-8
  - registers and stacks, 3-11
- Clipboard
  - in Appointment Book, 1-15
  - in Calculator, 3-12, 3-13
  - in Phone Book, 2-8
- columns (Phone Book)
  - hidden, 2-8, 10-5
  - hiding, 2-20
  - moving, 2-23
  - showing, 2-20
  - showing hidden, 2-8
- column width (changing), 2-22
- COMB, 9-10
- combinations, 4-7
- combining
  - Appointment Books, 1-46
  - Phone Books, 2-26
- completed tasks, 1-10, 1-11
- compounding interest, 5-18
- conditional expressions, 7-11
- CONT, 5-20, 9-6
- Conversion calculations
  - area, 6-7
  - currency, 6-5
  - length, 6-7

- mass, 6-7
  - overview, 6-2
  - starting, 6-3
  - temperature, 6-7
  - volume, 6-7
  - conversion rates
    - adding a new currency, 6-6
    - converting, 6-5
    - setting, 6-4
  - converting
    - angles and hours, 4-5
    - area, 6-7
    - currency exchange rates, 6-5
    - decimal hours to HMS, 4-6
    - degrees to radians, 4-6
    - HMS to decimal hours, 4-6
    - interest rates, 5-18, 5-19
    - length, 6-7
    - mass, 6-7
    - radians to decimal degrees, 4-6
    - temperature, 6-7
    - volume, 6-7
  - Copy command, 1-47, 1-48
    - Appointment Book, 1-15, 1-43
    - Calculator, 3-12
    - Phone Book, 2-8
  - copying
    - Appointment Book files, 1-43
    - appointments, 1-15
    - events, 1-15
    - numbers in the Calculator, 3-12
    - Phone Book records, 2-8, 2-29
    - tasks, 1-15, 1-16
  - COS, 4-5, 9-7, 9-10
  - cosine of an angle, 4-5
  - COST, 5-7, 9-3
  - creating. *See* scheduling
    - Appointment Book files, 1-41
    - appointments, 1-6
    - batch files, 1-33
    - categories in Phone Book, 2-5, 2-6
    - events, 1-6, 1-8
    - multiple Phone Records, 2-4
    - Phone Book files, 2-24
    - Phone Book records, 2-4, 2-29
    - Solver equation files, 7-16
    - subsets of Phone records, 2-13, 2-15
    - tasks, 1-8
  - CTIME, 9-10
  - currency
    - adding to the Calculator, 6-6
    - conversions, 6-4
    - exchange rates, 6-5
  - currency conversions
    - editing, 6-7
    - renaming, 6-7
  - customizing
    - Appointment Book display, 1-38
    - Phone Book display, 2-20, 2-21, 2-23
    - repeat activities, 1-25
    - repeating activities, 1-30
  - Cut command, 1-48
  - Cx,y, 4-7, 9-9
- ## D
- date
    - changing the format, 1-4
    - setting a new, 1-4
  - DATE, 9-10
  - Day view, 1-20, 1-49
  - DDAYS, 9-11
  - decimal places (setting), 3-19
  - defaults
    - alarms, 1-34, 1-35
    - appointments, 1-37
    - events, 1-37
    - tasks, 1-38
  - defining Phone Book subsets, 2-14
  - DEG, 4-6, 9-8, 9-11
  - deleting
    - Appointment Book items, 1-45
    - equations and variables, 7-9

- Phone Book records, 2-9, 2-29
- repeating appointments, 1-31
- shared variables, 7-9
- Solver catalog, 7-9
- Solver equations, 7-9
- Solver variables, 7-9
- displaying
  - Phone Book subsets, 2-18, 10-5
  - registers, 3-10
  - stack, 3-9
- Display Options command, 1-50
- division, 3-7
- DOS. *See* MS-DOS
- due calendar, 1-9
- due date, 1-8
- due today (tasks), 1-10

**E**

- editing
  - appointments and events, 1-15
  - Calc line, 3-5
  - currency names, 6-7
  - currency rates, 6-7
  - notes, 1-14
  - numbers in the Calc line, 3-5
  - Phone Book records, 2-8
  - Phone Book subsets, 2-19
  - phone records, 2-29
  - priorities (tasks), 1-10
  - repeating appointments, 1-31
  - Solver equations, 7-7
  - tasks (To-Do), 1-15
- Edit menu
  - Current Item command, 2-29
- Edit menu (Appointment Book)
  - Copy command, 1-15, 1-48, 1-52
  - Cut command, 1-15, 1-48, 1-52
  - Delete command, 1-31, 1-48
  - Item Details command, 1-48
  - Paste command, 1-48, 1-52
  - Paste Details command, 1-16, 1-48

- Undo command, 1-48, 1-52
- Edit menu (Calculator)
  - Copy command, 3-12
  - Paste command, 3-12
- Edit menu (Phone Book)
  - Add New Item command, 2-4
  - Copy command, 2-8
  - Cut command, 2-8
  - Delete Categories command, 2-6
  - Delete command, 2-9
- EduCALC, 3-21
- EFF%, 5-20, 9-6
- effective interest rates, 5-18, 9-6
- embedded keypad, 3-6
- end time (appointments), 1-7
- entering
  - numbers in the Calc line, 3-5
- equation catalog, 7-4
- equations. *See* Solver equations
- erasing. *See* deleting
- event options
  - Change Repeat, 1-7
  - Note, 1-7
  - Start Date, 1-7
  - Type, 1-7
  - View In Month, 1-7
  - View In Week, 1-7
- events
  - archiving, 1-45
  - copying, 1-15
  - defined, 1-5
  - deleting, 1-15
  - editing, 1-15
  - moving, 1-15
  - repeating, 1-25
  - scheduling, 1-6
  - setting defaults, 1-37
  - viewing only, 1-49
- E`X, 9-7

## examples

- Canadian mortgages, 8-7
- insurance policy, 8-16
- investment, 8-10
- leasing, 8-13, 8-14
- monthly mortgage payments, 8-12
- mortgage with balloon, 8-5
- personal finance, 8-13
- quarterly payments, 8-6
- real estate, 8-3
- return on savings, 8-10
- savings, 8-10, 8-11, 8-12

## Exchange button, 3-10

### exchange rates

- adding a new currency, 6-6
- converting, 6-5
- setting, 6-4

### exchanging numbers in the stack, 3-10

### EXP, 9-11

### EXPM1, 9-11

### exponential functions, 4-4

### Extract command, 1-47

- Appointment Book, 1-44
- Phone Book, 2-27

### extracting

- Appointment Book records, 1-44
- Phone Book records, 2-27
- sorting before, 2-27

## F

### FACT, 9-11

### factorials, 4-7, 4-8

### Fast Goto (Phone Book), 2-11

### files (Appointment Book)

- copying, 1-43
- creating, 1-41
- extracting items, 1-44
- merging, 1-46
- opening, 1-42
- opening IIP 100LX, 1-42
- opening IIP 95LX, 1-43

### removing data, 1-45

### files (Phone Book)

- creating, 2-24
- extracting records, 2-27
- merging, 2-26
- opening, 2-24
- opening IIP 100LX, 2-26
- opening IIP 95LX, 2-25

### files (Solver)

- creating, 7-16
- opening, 7-15
- recovering, 7-10
- saving, 7-15
- saving in a new file, 7-14

### Financial calculations

- adjustable rate mortgage, 5-17
- amortization, 5-15
- business percentage, 5-4
- comparing interest rate, 5-21
- comparing two interest rates, 5-21
- converting interest rates, 5-19
- effective annual rate, 5-21
- increase in sales, 5-5
- interest on a savings account, 5-14
- margin, 5-8, 5-9
- markup, 5-7, 5-9
- monthly loan payments, 5-13
- overview, 5-3
- percent change, 5-5
- percent of total, 5-6
- starting, 5-3

### Find command, 1-24

- appointments, 1-50
- phone records, 2-12

### finding

- Appointment dates, 1-24
- phone records, 2-11
- text, 1-24, 2-12
- with Fast Goto, 2-11

### fixed point format, 3-19

### footers (printing), 1-11

format

- Calculator numbers, 3-19

- date and time, 1-4

FP, 4-4, 9-7, 9-11

fractional part of a number, 4-4

full precision (setting), 3-19

functions

- Amortization, 9-5

- Business, 9-3

- Interest Conversion, 9-6

- Math, 9-7

- Solver, 9-10

- TVM, 9-4

future value, 5-13, 9-4, 9-11

FV, 5-11, 5-13, 9-4, 9-11

## G

generating random numbers, 4-7

GO, 9-5

Goto, 1-24

## H

hidden columns, 2-8, 2-20, 10-5

HMS, 4-6, 9-8, 9-11

HMS (to decimal hours), 4-6

hour conversions, 4-5

HP 100LX files

- Appointment Book files, 1-42

- Phone Book files, 2-26

HP 95LX

- Appointment Book files, 1-43

- Phone Book files, 2-25

HR, 4-6, 9-8, 9-11

## I

ICONV, 9-4

IDIV, 9-11

IF function (Solver), 7-11, 9-11

inserting

- Clipboard contents, 3-13

INT, 9-5, 9-12

integer part of a number, 4-4

interest conversions, 5-18, 5-19, 9-6

- 360/365, 5-18

- APR, 5-20

- continuous, 5-18

- effective, 5-18

- nominal annual, 5-18

INV, 9-12

investment examples

- mortgage payments, 8-10

- return on savings, 8-10

IP, 4-4, 9-7, 9-12

I%PER, 5-20, 9-6

Item Details command, 1-48

I%YR, 5-11, 5-13, 5-20, 9-4, 9-5, 9-6,

9-12

## K

keyboard

- Calculator memory keys, 3-5

- embedded keypad, 3-6

- navigation, 1-18, 1-52, 1-53, 2-7, 2-31

- shortcuts, 1-52, 2-31

## L

Last button, 3-10

learning about Windows, 1-2

length conversions, 6-7

LN, 9-7, 9-12

LNP1, 9-12

LOG, 9-7, 9-12

logarithmic functions, 4-4

logical operators

- in Solver equations, 7-11

- order of operation, 7-11

## M

M, 3-5

M+, 3-5

mantissa, 3-19

MARGIN, 5-8, 9-3

- MARKUP, 5-7, 9-3
- mass conversions, 6-7
- Math calculations
  - absolute value, 4-4
  - arc cosine of a number, 4-5
  - arc sine of a number, 4-5
  - arc tangent of a number, 4-5
  - combinations, 4-7
  - common (base 10) antilogarithm, 4-4
  - common (base 10) logarithm, 4-4
  - cosine of an angle, 4-5
  - decimal hours to HMS, 4-6
  - degrees to radians, 4-6
  - exponential functions, 4-4
  - factorials, 4-7, 4-8
  - finding a natural log, 4-5
  - fractional part, 4-4
  - generating random numbers, 4-7
  - HMS to decimal hours, 4-6
  - integer part, 4-4
  - logarithmic functions, 4-4
  - natural antilogarithm, 4-4
  - natural (base  $e$ ) logarithm, 4-4
  - permutations, 4-7
  - $\pi$  PI, 4-5
  - polar/rectangular conversions, 4-6
  - probability examples, 4-8
  - pseudo-random numbers, 4-7
  - radians to degrees, 4-6
  - random numbers, 4-8
  - random numbers (generating), 4-7
  - rounding, 3-16
  - sine of an angle, 4-5
  - starting, 4-3
  - tangent of a number, 4-5
  - trigonometric functions, 4-5
- Math functions, 9-7
- MAX, 9-12
- memory
  - clearing stacks and registers, 3-11
  - keys, 3-5
  - recalling values from, 3-11
  - storing values in, 3-10
- merging
  - Appointment Book files, 1-46
  - Phone Book files, 2-26
- MIN, 9-12
- M-, 3-5
- MOD, 9-12
- modes
  - Algebraic, 3-21
  - angle, 3-20
  - RPN, 3-21
  - TVM BEGIN/END, 5-13
- modifying. *See* editing
- Month command, 1-49
- monthly payments, 5-13
- Month view (Appointment Book), 1-22
- mortgage components
  - FV, 5-11
  - I%YR, 5-11
  - N, 5-11
  - PMT, 5-11
  - PV, 5-11
- mortgage examples
  - balloon payments, 8-5
  - Canadian mortgages, 8-7
  - estimating mortgage payments, 8-13
  - estimating payments, 8-12
  - quarterly payments, 8-6
- moving
  - columns, 2-23
  - in Appointment Book, 1-52, 1-53
  - in Phone Book, 2-7, 2-31
- M register
  - adding values, 3-5
  - recalling values, 3-5
  - storing values, 3-5
  - subtracting values, 3-5
- MS-DOS (alarms in), 1-34
- multiplication, 3-7

## N

(**N**) (Sign) button, 3-5

N, 5-11, 5-13, 9-4

N!, 4-7, 9-9

names

- adding multiple, 2-4

- adding to Phone Book, 2-4, 2-29

- deleting from Phone Book, 2-9, 2-29

- editing currency, 6-7

- editing in Phone Book, 2-8

- finding in Phone Book, 2-11, 2-12

- saving in a subset, 2-14

- sorting in Phone Book, 2-21

navigation keys

- Appointment Book, 1-18, 1-52

- Phone Book, 2-7, 2-31

NEW, 5-5, 9-3

New command, 1-47, 1-48

- Appointment Book, 1-41

new tasks, 1-10

Next Day With Item command, 1-50

Next Item command, 1-50

nominal interest rates, 5-18

notation. *See* number format

notes

- attaching to appointments, 1-7

- attaching to events, 1-7

- column symbol, 1-14

- editing, 1-14

- with tasks, 1-9

number format

- All, 3-19

- engineering, 3-19

- fixed point, 3-19

- scientific, 3-19

number of periods, 5-13

## O

OLD, 5-5, 9-3

Open command, 1-47

- Appointment Book, 1-42

- Calculator, 7-15

- Phone Book, 2-24

opening

- Appointment Book files, 1-42

- HP 100LX Appointment files, 1-42

- HP 100LX Phone files, 2-26

- HP 95LX Appointment files, 1-43

- HP 95LX Phone files, 2-25

- Phone Book files, 2-24

- Solver files, 7-15

options

- appointments, 1-6

- events, 1-6

- RPN or algebraic mode, 3-21

- tasks, 1-8

Options menu (Appt)

- Defaults, 1-50

- Display Options, 1-50

ordering variables in equations, 7-8

## P

PART, 5-6, 9-3

Password command, 1-47

past due tasks, 1-10

Paste command, 1-48

- Appointment Book, 1-15

- Calculator, 3-12

- Phone Book, 2-8

Paste Details command, 1-16

pasting

- Clipboard contents, 3-13

- entire appointments, 1-15

- events, 1-15

- parts of appointments, 1-16

- Phone Book records, 2-8

- Phone records, 2-29

- tasks, 1-15, 1-16

- percent
  - change, 5-5
  - of total, 5-6
- %CHG, 5-5
- %TOTAL, 5-6
- periodic payment, 5-13
- PERM, 9-12
- permutations, 4-7
- Personal category, 2-5
- personal finance, 8-15
- Phone Book
  - column width, 2-22
  - commands, 2-28
  - customizing, 2-20, 2-21, 2-23
  - keyboard shortcuts, 2-31
  - moving around, 2-7, 2-31
  - moving columns, 2-23
  - problems with, 10-4
  - screen, 2-3
  - starting, 2-3
- Phone Book files, 2-24
  - creating, 2-24
  - extracting records, 2-27
  - HP 100LX, 2-26
  - HP 95LX, 2-25
  - merging, 2-26
  - opening, 2-24
- Phone Book records
  - adding, 2-4, 2-29
  - adding multiple, 2-4
  - categories, 2-5
  - copying, 2-8
  - deleting, 2-9, 2-29
  - deleting categories, 2-6
  - deleting subsets, 2-18
  - editing, 2-8, 2-29
  - finding, 2-11, 2-12
  - moving, 2-8
  - number limited to 2,500, 2-4
  - printing, 2-10
  - sorting, 2-21
  - subsets of, 2-14
  - viewing subsets, 2-18
- PI  $\pi$ , 4-5, 9-7, 9-12
- PMT, 5-11, 5-13, 9-4
- polar/rectangular conversions, 4-6
- positioning columns, 2-23
- present value, 5-13
- Prev Day With Items command, 1-50
- Prev Item command, 1-50
- PRICE, 5-7, 9-3
- PRIN, 9-5
- Print command, 1-11, 1-47, 2-10
- printing
  - footers, 1-11
  - multiple phone records, 2-10
  - new page for each day, 1-11
  - options (Appointment Book), 1-11
  - phone records, 2-10
  - selected phone columns, 2-10
  - selected phone records, 2-10
  - skipping, 1-11
  - with a title, 2-10
- print setup, 1-48, 2-28
- prioritizing tasks, 1-9, 1-10
- probability calculations
  - combinations, 4-7, 4-8
  - examples, 4-8
  - factorials, 4-7, 4-8
  - generating random numbers, 4-7
  - permutations, 4-7, 4-8
  - pseudo-random numbers, 4-7
  - random numbers, 4-7
- probability functions, 4-7
- problems
  - Appointment Book, 10-3
  - Calculator, 10-6
  - Phone Book, 10-4
- programs (running with alarms), 1-33
- pseudo-random numbers, 4-7
- PV, 5-11, 5-13, 9-4
- Px,y, 4-7, 9-9



P/YR, 9-4, 9-6

## R

**(R)** (Recall) button, 3-9, 3-11

RAD, 4-6, 9-8, 9-13

RADIUS, 4-6, 9-8, 9-13

RAN#, 4-7, 9-9, 9-13

RAND, 9-13

random numbers, 4-7, 4-8

RCL button, 3-11

real estate examples

annual interest rate, 8-4

Canadian mortgages, 8-7

mortgage quarterly payments, 8-6

mortgage with balloon, 8-5

recalling

numbers from registers, 3-11

numbers from the stack, 3-9

values from memory, 3-5

records. *See* Phone Book records

registers

arithmetic, 3-11

clearing, 3-11

displaying, 3-10

recalling numbers, 3-11

storing numbers in, 3-10

relational operators, 7-11

Remove command, 1-47

removing. *See* deleting

renaming

Phone Book subsets, 2-19

repeating

appointments, 1-7, 1-25

custom, 1-30

daily, 1-26

events, 1-7, 1-25

monthly, 1-28

tasks, 1-9, 1-25

weekly, 1-27

yearly, 1-29

repeating appointments

deleting, 1-31

editing, 1-31

scheduling, 1-25

Repeat Last Find command

appointments, 1-50

Phone Book, 2-30

resetting alarms, 1-34

Reverse Polish Notation, 3-21

RM, 3-5

RND, 3-17, 9-7, 9-13

Roll button, 3-9

rounding numbers, 3-17

RPN

learning materials, 3-21

setting, 3-21

## S

**(S)** (Store) button, 3-10, 3-11

Save button, 2-4

saving

numbers in registers, 3-10

Solver catalog, 7-14, 7-15

scheduling

appointments, 1-6

events, 1-6

repeating activities, 1-25

shortcuts, 1-6

tasks, 1-8

scientific format, 3-19

scrolling

in Appointment Book, 1-18, 1-52

in Phone Book, 2-7, 2-31

searching. *See* finding

SEED, 4-7, 9-9

setting

algebraic mode, 3-21

appointment defaults, 1-37, 1-38

currency exchange rates, 6-4

date and time format, 1-4

number of decimal places, 3-19

- OmniBook date, 1-4
- OmniBook time, 1-4
- RPN mode, 3-21
- setting alarms
  - as appointment reminder, 1-32
  - to run a program, 1-33
- SGN, 9-13
- shared variables
  - defined, 7-8
  - deleting, 7-9
- shortcut keys
  - Appointment, 1-52
  - Phone Book, 2-31
- showing Phone Book columns, 2-20
- silent alarms, 1-34
- SIN, 4-5, 9-7, 9-13
- sine of an angle, 4-5
- snooze alarms, 1-34, 1-35
- Solve Catalog, 7-4
- Solver
  - how it works, 7-12
- Solver calculations
  - Canadian mortgages, 8-7
  - lease payments, 8-13
  - price of insurance, 8-15
- Solver equations
  - adding to catalog, 7-4
  - allowed length, 7-4
  - catalog, 7-4
  - clearing variables, 7-8
  - conditional expressions, 7-11
  - deleting, 7-9
  - editing, 7-7
  - iterative search, 7-12
  - logical operators, 7-11
  - naming, 7-4
  - ordering variables, 7-8
  - overview, 7-2
  - recovering deleted, 7-10
  - relational operators, 7-11
  - saving changes, 7-15
  - saving in a new file, 7-14
  - shared variables, 7-8
- Solver files
  - creating, 7-16
  - opening, 7-15
  - recovering, 7-10
- sorting
  - Phone Book records, 2-21
- SPFV, 9-13
- SPPV, 9-13
- SQ, 9-13
- SQRT, 9-14
- stack
  - clearing, 3-11
  - displaying, 3-9
  - Exchange button, 3-10
  - Last button, 3-10
  - moving numbers in, 3-9
  - Roll button, 3-9
- start date
  - appointments, 1-7
  - events, 1-7
  - tasks, 1-8
- starting
  - Appointment Book, 1-3
  - Arithmetic application, 3-4
  - Conversion application, 6-3
  - HP Financial Calculator, 3-7
  - TVM application, 5-10
- start time (appointments), 1-7
- status symbols (tasks), 1-10
- STO button, 3-10
- storing
  - numbers in registers, 3-10
  - values in memory, 3-5
- subsets (Phone Book)
  - creating, 2-14
  - deleting from Phone Book, 2-18
  - editing, 2-19
  - renaming, 2-19
  - viewing, 2-18, 10-5

- subtracting
  - numbers, 3-7
  - values in memory, 3-5
- switching
  - BEGIN/END mode, 5-13
  - numbers in the stack, 3-10
  - subsets, 2-18, 10-5
- symbols. *See* status symbols

## T

- T** (Last) button, 3-10
- TAN, 4-5, 9-7, 9-14
- tangent of a number, 4-5
- task options
  - Carry Forward, 1-9
  - Change Repeat, 1-9
  - Due Date, 1-8
  - Note, 1-9
  - Priority, 1-9
  - Start Date, 1-8
- tasks
  - archiving, 1-45
  - attaching notes, 1-9
  - checking off, 1-11
  - checking the status, 1-10
  - copying, 1-15, 1-16
  - defined, 1-5
  - deleting, 1-15
  - editing, 1-15
  - moving, 1-15, 1-16
  - prioritizing, 1-10
  - repeating, 1-25
  - scheduling, 1-8
  - setting defaults, 1-38
- task symbols
  - completed, 1-10
  - due today, 1-10
  - new, 1-10
  - past due, 1-10
- temperature conversions, 6-7
- 360/365 interest rate, 5-20

- 360/365 rate, 9-6
- time
  - changing for an appointment, 1-13
  - changing the format, 1-4
  - setting a new, 1-4
- timeout (snooze alarms), 1-35
- To-Do. *See* tasks
- To-Do List command, 1-49
- %TOTAL, 9-3
- TOTAL, 5-6, 9-3
- trigonometric functions, 4-5, 4-6
- TRN, 9-14
- TVM
  - estimating mortgage payments, 8-12
- TVM application
  - BEGIN/END mode, 5-13
  - comparing cases, 5-14
  - starting, 5-10
- TVM calculations
  - adjustable rate mortgage, 5-17
  - amortization, 5-15
  - an effective annual rate, 5-21
  - comparing interest rates, 5-21
  - comparing two interest rates, 5-21
  - converting interest rates, 5-19
  - interest on a savings account, 5-14
  - monthly loan payments, 5-13
- TVM examples
  - annual interest rate, 8-4
  - mortgage with balloon, 8-5
  - quarterly payments, 8-6
  - return on savings, 8-10
- TVM functions, 9-4
- 24-hour clock, 1-4
- type
  - appointment or event, 1-7

## U

- Undo command, 1-48

unit conversions  
  area, 6-7  
  currency, 6-4  
  length, 6-7  
  mass, 6-7  
  overview, 6-2  
  temperature, 6-7  
  volume, 6-7  
USFV, 9-14  
USPV, 9-14

## V

variables  
  clearing, 7-8  
  deleting, 7-9  
  ordering, 7-8  
  sharing between equations, 7-8  
View Events Only command, 1-49  
viewing  
  events, 1-49  
  registers, 3-10  
  stack, 3-9  
  subsets, 2-18, 10-5  
views  
  Day view, 1-20, 1-49  
  displaying, 1-19

Events Only, 1-49  
Month view, 1-22, 1-49  
To-Do List, 1-49  
Week view, 1-21, 1-49  
Year view, 1-23, 1-49  
volume conversions, 6-7

## W

Week view, 1-21, 1-49  
Windows  
  other learning sources, 1-2

## X

X, 4-7, 9-8  
XCOORD, 4-6, 9-8

## Y

Y, 4-7, 9-9  
YCOORD, 4-6, 9-8  
Year view, 1-23, 1-49

## Z

Z (Exchange) button, 3-10

---

## Contacting Hewlett-Packard

### For Information about Using This Product

If you have a general question about this product, or need information about other products, call our automated information service.

HP Customer Support Automated Information Service  
(800) 443-1254 (toll free, no operator is available)  
24 hours per day, 7 days per week

If you have a technical question not answered by the automated information service, call the phone number below for HP Customer Support. You can also mail or fax your questions (responses returned by mail, phone or fax within two weeks).

HP Mobile Computing Customer Support  
1000 N.E. Circle Blvd.  
Corvallis, OR 97330, U.S.A.  
(503) 757-2004 (toll call)  
(503) 750-5488 (toll call, fax)  
5:00 am to 5:00 pm Pacific time, Monday–Friday excluding holidays

If you are outside the United States, contact your Hewlett-Packard dealer or sales office for technical information.

### For Hardware Service

Before you send your unit for service, you must call HP Customer Support at the number listed below. See chapter 14 in the *OmniBook Operating Guide* for diagnostic instructions and other service information. The U.S. service center address is

Hewlett-Packard Corvallis Service Center  
1030 N.E. Circle Blvd.  
Corvallis, OR 97330, U.S.A.  
(503) 757-2004 (HP Customer Support)

If you are outside the United States, contact your Hewlett-Packard dealer for troubleshooting assistance—see chapter 14 in the *OmniBook Operating Guide*.  
Support programs and availability subject to change without notice.

---

# Contents

## **Part 1: Appointment Book**

1: Using the Appointment Book

## **Part 2: Phone Book**

2: Using the Phone Book

## **Part 3: HP Financial Calculator**

3: Calculator Basics  
4: Advanced Math Functions  
5: Financial Applications  
6: Currency and Unit Conversions  
7: Solving Equations  
8: Practical Examples  
9: Calculator Reference

## **Part 4: Troubleshooting**

10: If Things Go Wrong



**HEWLETT  
PACKARD**

For internal use only:  
F1030-90072 (English)  
Printed in U.S.A. 9/93

Part Number (P) F1030-90086

Edition 1

